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ABSTRACT

This guide is intended for use in teaching a postsecondary-level course in corporate electronic publishing systems. The following topics are covered: cultural influence of graphic communication (early events in communication, early attempts at printing); typefaces and styles of type (type style characteristics and their use); tools and methods of graphic design (measuring type, using drawing equipment and design instruments, performing copyfitting procedures); graphic design (predesign planning, layout procedures, design and layout considerations); principles of design (design elements, color and creativity in design); the layout process (art and copy preparation; thumbnail sketches; rough, comprehensive, dummy, and mechanical layouts); fundamentals of computer graphic workstations (video displays, video controller boards, computers, printers, input devices); computer graphics; paint programs and their operation; desktop publishing systems and their operation; layout in desktop publication; and design and design principles in desktop publication. The curriculum contains materials for students and instructors, including a syllabus and a unit-by-unit course and student laboratory guides. (MN)

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ED299422

Curriculum Improvement Project

CORPORATE ELECTRONIC PUBLISHING SYSTEMS

by Dwight Courtney and Ed Crowley

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

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FOREWORD

Galveston College received a grant from the Coordinating Board of the Texas College and University System, Division of Community Colleges and Technical Institutes, to investigate the applications of network technology in an office occupations instructional laboratory. The grant also enabled us to revise our program based on our evaluation of the competencies our students were achieving compared to those needed by personnel working in the automated office. As a result of this "gap analysis," we developed a cluster of modules around network applications and this curriculum guide for a course in Corporate Electronic Publishing Systems. The curriculum contains materials for students and instructors, including a syllabus and a unit-by-unit guide. The units have been designed to teach the concepts of the publication process both manually and electronically.

My thanks go to those people who worked with me on this project--Dwight Courtney, Ed Crowley, Maria Eliaz, Jean Jahoor, and Julius Kimling of Galveston College and Beth Hill of McLennan Community College in Waco, Texas. I also wish to express my gratitude to the personnel in the Division of Community Colleges and Technical Institutes of the Coordinating Board for their assistance and guidance. Questions or comments about this project may be directed to me at (409) 763-6551.

Cheryl L. Willis, Ph.D.
Project Director

INSTRUCTOR MATERIALS

COURSE SYLLABUS

OFT 2404: CORPORATE ELECTRONIC PUBLISHING SYSTEMS

INSTRUCTOR'S GUIDE

COURSE SYLLABUS

COURSE NUMBER: OFT 2404

LECTURE HOURS: 3

LAB HOURS: 2

CONTACT HOURS: 4

CATALOG DESCRIPTION:

Designed to teach the student how to select, use, construct, implement, and integrate text, business graphics, data, line art and photographs to produce quality business publications electronically. Topics will include corporate publications, CEPS hardware and software requirements, text editing, graphics design, page layout, font selection and laser printers.

PREREQUISITE:

OFT 1205 or equivalent--Word Processing I is a hands-on introduction to the basic functions of a word processing system -- creating, revising and printing documents.

TEXT:

Corporate Electronic Publishing Systems Student's Laboratory Guide.

Corporate Electronic Publishing Systems Instructor's Course Guide.

REFERENCES:

Introduction to Design for Desktop Publishing, by Wayne and Ruth Amisker, Fliptrack Learning Systems, 1987.

Design for Desktop Publishing, John Miles, Chronicle Books, San Francisco, 1987.

Comprehensive Graphic Arts, Ervin A. Dennis and John D. Jenkins, Howard W. Sams and Co. Inc., 1974.

Photo-Offset Lithography, Z.A. Prust, the Goodheart-Willcox co., Inc., 1977.

Lithographic Technology, Ervin A. Dennis, Bobbs-Merrill Education Publishing, 1980.

EQUIPMENT AND MATERIALS REQUIRED:

Hardware:

Microcomputer (IBM Model 50 or compatible) per student
Laser Printer

Software:

Word processing software such as Wordstar 2000+ by Microsoft Corporation or Multimate Advantage by Ashton-Tate Corporatation
Desktop publishing software such as PFS First Publisher.

INSTRUCTIONAL PROCESS:

Lecture
Group discussion
Class and laboratory assignments
Tests
Independent student activity
Instructor directed activity

EVALUATION OF STUDENTS:

Class and laboratory assignments will make up 65% of the final grade. These assignments are to be done by the student in the laboratory. These jobs are to be graded by the following guidelines:

Thumbnails will make up 10% of the final grade. Thumbnails will be graded on the basis of originality and aesthetics.

The rough layout will make up 5% of the final grade. Rough layouts will be graded on how closely the rough follows the selected thumbnail.

The comprehensive layout will make up 5% of the final grade. The comprehensive will be graded on neatness and how closely the comprehensive layout follows the rough layout.

The computer produced layout will make up 45% of the final grade. If the computer produced layout is camera-ready on the first submission, a grade of 100 will be assigned to that job. if the job is not camera-ready on the first submission, the student will make the necessary corrections and resubmit. If the job is correct on the second submission a grade of 85 will be assigned to the job. If the job is not camera-ready on the second submission, the student will make the necessary corrections and resubmit. If the job is correct on the third submission, a grade of 75 will be assigned to that job. If the job is not camera ready on the third submission, a grade of 50 will be assigned to that job.

Tests make up 15% of the final grade and will be given at the end of each unit. The material covered on tests will be the information given in handouts and in the lecture.

Outside class work will make up 10% of the final grade. The outside of class work will be assigned from the Student's Laboratory Guide.

Technique will make up 10% of the final grade. The technique grade will evaluate the students ability to work alone, asking questions only when necessary, the ability to make decisions after reading and comparing information, the ability to use the software with a minimum amount of help from the instructor, the ability to use time wisely, the ability to bring all necessary supplies and materials to class, and the ability to maintain a positive attitude toward the instructor and course.

FINAL GRADE DETERMINATION:

Class and Laboratory Assignments	65%
Tests	15%
Outside class work	10%
Technique	10%
TOTAL	100%

COMPETENCY STATEMENTS:

Office Technology Program exit competencies upon which course is based:

1. Discuss the role of the secretary in the production of coporate publications.
2. Discuss the components of the traditional publishing process.
3. Discuss the characteristics of typefaces.
4. Discuss the uses for various typefaces.
5. Identify samples of various typefaces.
6. Identify uses of type measuring tools.
7. Demonstrate ability to use copyfitting procedure.
8. Discuss pre-design considerations in graphic design.
9. Describe layout procedure.
10. Discuss design and layout considerations in graphic design.
11. Describe components of computer graphic workstations.
12. Describe the capabilities of various computer graphics applications programs.
13. Discuss the advantages of desktop publishing capabilities to the business organization.
14. Discuss the components of the desktop publishing workstation.
15. Discuss the components of the desktop publishing cycle.
16. Demonstrate the ability to operate a desktop publishing package.
17. Prepare text files for a desktop publication.
18. Prepare graphic files for a desktop publication.
19. Design layout for a desktop publication.
20. Produce a desktop publication.

UNIT CONTENTS

UNIT 1: Cultural Influence of Graphic Communication

A. Significant early events in communication

1. The Cairn
2. Pictures and symbols recorded on stone
3. Cuneiform punches - clay tablets - the world's first types
4. The development of crude paper
5. Picture - writing using symbols, pictures and heiroglyphics.
6. The evolution of the alphabet

B. Early attempts at printing

1. Printing from wood blocks
2. The development of books
3. The invention of movable type
4. The origin of type faces
   a. Roman type
   b. Italic types
   c. Gothic types
5. Early printing in Europe and the Americas

C. Significant events in the United States

1. The first printing press
2. The first book printed in the Colonies
3. The first paper mil
4. The beginnings of newspapers
5. Early typesetting

UNIT 2: Typefaces and Styles of Type

A. An introduction to typefaces

1. The Communication Link- The human voice
2. Psychology of a type face
3. The aesthetics of type
4. How to choose typefaces for publications
5. Typeface classifications

B. Development of typefaces

1. Designing a typeface
2. How a typeface is created
3. The steps in typeface development

C. Typeface Characteristics

1. Distinguishing characteristics
2. Type fonts
3. Families of type
4. The parts of letters and letter weights

D. Text type styles

1. Historical Background of text type
2. Uses of text type
3. Samples of text type

E. Roman Type Styles

1. Historical background of Roman face
2. Uses of Roman face type
3. Samples of Roman face type

F. Square - Serif Typestyles

1. Historical background of Square-serif faces of type.
2. Uses of square serif faces
3. Samples of square-serif faces

G. Sans-Serif type styles

1. Historical background of Sans-serif type faces
2. Use of sans-serif type faces
3. Samples of sans-serif type styles.

H. Script Type Styles

1. Historical background of script type faces
2. Uses of Script type faces
3. Samples of script type faces

I. Novelty Type Styles

1. Historical background of novelty type faces
2. Uses of novelty type faces
3. Samples of novelty type faces.

J. Using Styles of type

1. Consistency within publications
   a. Headlines
      (1) Bold
      (2) Shadow
      (3) Outline

b. Body Copy, Text Copy
(1) Plain
(2) Italic
(3) Underline
(4) Using font variations

UNIT 3: Tools and Methods of Graphic Design

A. Measuring type

1. Basic units of measurement
a. points
b. picas
c. agate
d. Metric
e. ens and ems
2. Guidelines for measuring type
3. Measuring tools
4. Type composition measurement
a. Letters and letter spacing
b. word spacing
c. Line spacing
d. leading
e. Line length

B. Drawing equipment and design instruments

1. Drawing boards
2. T-squares and triangles
3. Rules and scales
4. Drawing curves
5. Pencils
6. Inking pens
7. Ruling pens
8. Airbrushes
9. Paint brushes and paints
10. Knives
11. Masking film
12. Charcoal or chalk
13. Proportion scale

C. Copyfitting Procedure

1. Definition of Copy fitting
2. Methods of Copy fitting
a. Character count method
b. Character space method

UNIT 4: Introduction to Graphic Design

A. Pre-design planning

1. Objective of the design
   a. Purpose of the design
   b. Why is design being done?
   c. What is the reader being influenced to do?
2. Target Audience
   a. Demographics
      (1) Where they live
      (2) Income level
      (3) Ages
      (4) Educational level
      (5) Sex (male or female)
      (6) Particular occupation
      (7) Cultural background
      (8) Other
   b. Psychographics
      (1) Opinions
      (2) Interests
      (3) Attitudes
      (4) Goals (Immediate and Long Range)
3. Personality of the design
   a. Image of design
      (1) classy
      (2) sophisticated
      (3) gaudy
      (4) dignified
      (5) humorous
      (6) serious
      (7) formal
      (8) informal
   b. The paper type
   c. Topography and illustrations
4. Dominate design elements
   a. photographs
   b. illustrations
   c. cartoons
   d. combinations
5. Budget limitations

6. Layout format
   a. Booklet
   b. Folder
   c. Bulletin
   d. Brochures
   e. Single sheet
   f. Book
   g. Approximate number of pages
      (1) Printed one side or both
      (2) One or several pages
7. Approximate finished size of design
8. Traits of existing designs to be matched or beat
9. The affect of the distribution method on format or design
10. Reproduction method
    a. Copy machine
    b. Laser printer
    c. Small press
    d. large press
11. Finishing and Bindery Requirements
    a. Trim requirements
    b. Perforated
    c. Scored
    d. Folded
    e. Bindery method
12. Time needed to complete design
    a. Staff time available for production
    b. Estimated hours needed for completion
13. Approximate date of completion
14. Estimated cost for the design

B. Layout Procedure

1. Thumbnail
2. Rough Layout
3. Comprehensive layout

C. Design and Layout Considerations

1. The importance of planning
2. The importance of layout and design in obtaining a quality product
3. The importance of readability
4. The importance of simplicity
5. The importance of type and typography knowledge.
6. The importance of point system knowledge.
7. The importance of color and its effect on people.
8. The importance of basic design principles.

UNIT 5: Prinicples of Design

A. Elements of Design

1. Element of Lines
   a. Continuity, movement or belonging
   b. Lines as a message
2. The element of form
3. The element of mass
4. The element of texture
5. The element of hue
6. The element of value
7. The element of chroma
8. The element of space.
   a. Plane
   b. Multiplane
   c. Continuous

B. Design Guidelines

1. Space
2. Page proportion
   a. The golden proportion
   b. Common page proportions
   c. Proportions not used
3. Page Balance
   a. Informal balance
   b. Formal balance
   c. Optical centers of pages
4. Contrast
   a. Methods of emphasizing words with type
   b. The elements of a page
   c. The importance of imagination
   d. The use of color
5. Rhythm
   a. Eye direction and eye movement control
   b. Achievement of rhythm
      (1) Graduated tone
      (2) Interrupted
      (3) Staccato
      (4) Repetition formats
      (5) Recurring image elements
         (a) Shapes
         (b) Sizes
         (c) Directions
         (d) Tones

6. Unity
   a. Elements tied together
   b. Patterns for unity
7. White space
   a. Readibility
   b. Increased communication
8. New designer mistakes
   a. Say-nothing illustrations that are included just to fill space
   b. Cluttered illustrations
   c. Attempts to be different
   d. Failure to complement the accompanying text
   e. Unorganized illustrations
   f. Symbols used that have no meaning or that cannot be easily understood. Overly symbolic illustrations.

C. The use of creativity in design

1. Avoid being critical or negative about the design - Think positive
2. Observe what other successful designers do and apply their principles
3. Brainstorm with others
4. Write down ideas when they are fresh.
5. Give incubation time to ideas
6. Do lots of thumbnails to stimulate thinking.
7. Don't procrastinate - Don't put off getting started
8. Use past work to help with ideas.
9. Concentrate on the most dominant element in the layout.

D. Color for designing

1. Four questions designers consider
   a. How is color produced in printed products?
   b. What influences the appearance of color?
   c. How does colored printing ink work?
   d. How does paper influence color?
2. The color wheel
   a. Primary colors
   b. Secondary colors
   c. Intermediate colors
3. Light and color quality
4. Color harmony
   a. Monochromatic color harmony
   b. Analogous color harmony
   c. Complimentary color harmony
   d. Triadic color harmony
5. Psychology of color
   a. Warm colors
   b. Cool colors
6. Use of color for identification

UNIT 6: The Layout Process

A. Art and copy preparation

1. Line copy
2. Type matter
3. Continuous tone copy and screens
4. Illustrations and type considerations
5. Scaling copy for design
6. Cropping to fit space
7. Register marks
8. Trim marks
9. Margins

B. Thumbnail sketches

1. Materials needed
2. Methods and procedures of preparation

C. Rough layouts

1. Materials needed
2. Methods and procedures of preparation

D. Comprehensive Layouts

1. Materials needed
2. Methods and procedures of preparation.

E. Dummy layouts

1. Page order
2. Basic page content
3. Folding order of the signature

F. Mechanical Layouts

UNIT 7: Fundamentals of Computer Graphic Workstations

A. Workstation Fundamentals

1. Hardware components overview
   a. Video displays
   b. Video controllers
   c. Computer systems
   d. Printers
   e. Input devices
2. Compatibility
   a. Physical
   b. Electrical
   c. Standards and conventions

B. Video displays

1. CRT technology
2. Raster technology
3. Alternate technologies

C. Video controller boards

1. PC standards
   a. CGA
   b. MDA and HGC
   c. EGA
   d. VGA
2. Non-standard
   a. Full page
   b. Interlace vs noninterlace

D. Computers

1. Vacuum tubes -- the first generation
2. Transistors -- the second generation
3. Integrated circuits -- the third generation
4. Types of computers
   a. Microcomputers
   b. Minicomputers
   c. Mainframes

E. Printers

1. Laser
   a. Postscript
   b. Non-postscript
2. Dot matrix
3. Typesetters
4. Other output devices

F. Input devices

1. Mice
2. Manual digitizers
3. Electronic digitizers
4. Scanners

UNIT 8: Computer Graphics Overview

A. Fundamental Terminology

1. Pixels and display resolution
   a. The display layout
   b. Locating pixels
   c. A video worksheet
2. Hardware/Software interactions
   a. Aspect ratios
   b. Monitor adjustments

B. Application programs

1. Overview
   a. What differentiates a CAD program from a paint program.
   b. Vectors vs bit-maps
   c. Graphic primitives
   d. Coordinate systems
2. Computer Aided Design
   a. Menu systems
   b. Drawing editor environments
   c. Editing Commands
   d. Hatch, layer, block, and inset
   e. Graphic arrays
3. Paint programs
   a. Drawing cursors
   b. Toolboxes
   c. Dialog boxes
   d. Double clicking
4. Presentation graphics
   a. Types of Lotus graphics
   b. Harvard presentation graphics

UNIT 9: Paint Program Overview

A. Starting PaintShow

1. The PaintShow Environment
   a. The tool box
   b. The Line-Width Palate
   c. The Pattern Palate
   d. The Menu Bar
   e. The Drawing Board
2. The PaintShow Interface
   a. Working with a mouse
      Screen cursor positioning
      Clicking
      Double clicking
   b. Dialogue boxes

B. Working with the tool box

1. Drawing with the pencil
   a. Positioning the screen cursor
   b. Operating the mouse
2. The shapes
   a. The filled rectangle
   b. Pattern selection
3. Color Selection
   a. Mouse operation
   b. Line-width palate
4. Drawing erasure
   a. Pull down menus
   b. The file menu
5. Text
   a. The text tool
   b. Entering text
6. Selecting and Moving
   a. The selection tool
   b. The selection box
   c. The hand cursor
7. Picture saving
   a. The file menu
   b. The Save option
8. Loading a picture
   a. The Load option
   b. The Show Screen option
9. Exiting PaintShow
   a. The Quit option

UNIT 10: Paint Program Operation

A. The Tool Box

1. Painting tools
   a. Pencil
   b. Brush
   c. Lines
      Line width selection
      Ortho
      Grid
   d. Line Fill
   e. Spray
      Select nozzles
   f. Area fill
      Stopping area fill
      The Undo command
2. The shapes
   a. Hollow
   b. Filled
   c. Squares and circles
3. Line Widths
   a. The line width palette
   b. Color selection
4. Fill patterns
   a. Alternate pattern selection
   b. Pattern editing
5. Positioning tools
   a. Scroll
   b. The scissors/selection tool
      Move
      Copy
6. The eraser
   a. Changing eraser size
   b. Magnify
7. Text
   a. Font size
   b. Style

B. Menu Bar Operation

1. Dialogue boxes
   a. Selecting options
   b. Cancel
2. File operations
   a. New picture
   b. Loading a picture
      Double clicking
   c. Saving a picture
      Default file name

d. Printing a picture
Portrait orientation
Landscape orientation
DPI options
e. Loading a pattern
f. Saving a pattern
g. DOS shells
h. Exiting PaintShow

3. Edit operations
a. Clipboard Operations
Cut
Copy
Paste
b. Reverse
c. Trace edges
d. Flip
Horizontal
Vertical
e. Rotate

4. Screen Tools
a. Magnify
Erase
Paint
b. Show Screen
c. Show Page
Repositioning the Drawing Board
d. Grid

5. Fonts
a. Font types
b. Character styles
c. Font sizes

C. Advanced topics

1. Slide shows
2. Catch screens

UNIT 11: Desktop Publishing Overview

A. Introduction

1. History
a. Paul Brainerd - 1985
b. The Apple turnkey system
c. Recent developments
2. Benefits
a. Reduction in payments to outside services
b. Increased control over documents
c. Increased standardization

d. Reduced production time
e. Increased choice in production quality (i.e. laser or typeset output).

3. Marketplace growth
   a. Problems of growth
   b. Users lacking publishing skills
   c. System integrators lacking computer skills

B. Desktop publishing workstations

1. Major hardware components
   a. Digitizer
   b. Video section
   c. Pointing device
   d. Printer
   e. Computer
2. Major software components
   a. Word processor
   b. Graphics
   c. Paint programs
   d. Clip art
   e. Page composition language

C. The traditional publishing cycle

1. Proposal (who, what, where, when, and how much)
   a. Schedule
   b. Budget
   c. Staffing
   d. Audience
   e. Content
2. Manuscript and illustration generation
3. Editing
4. Typesetting
5. Layout
6. Printing

D. The desktop publishing cycle

1. Proposal
2. Word and image processing
3. Publication design
4. Review
5. Printing

UNIT 12: Desktop Publishing Operation

A. Starting First Publisher

1. The First Publisher Environment
   a. The menu bar
   b. Side tools
   c. Elevator
   d. The text cursor
   e. The mouse cursor
2. The First Publisher interface
   a. Working with a mouse
      click
      drag
      grab
      select
   b. Dialogue Boxes
   c. Page elevator
3. Elements of a page
   a. Text overlay
   b. Graphics overlay
   c. Clipboards
4. Relevant file types
   a. Text files
   b. Graphic files
   c. ASCII files
   d. Publication files

B. Menu overview

1. Menu Operation
   a. Selection
   b. Speed keys
   c. Nonselectable options (grey areas)
   d. Previously selected options (check mark)
2. File menu
   a. Get publication
   b. Get graphics
   c. Save publication
   d. Print current publication
   e. Make new publication
   f. Exit
3. Page menu
   a. Set the page format
   b. Wrap the page around a graphic
   c. Rulers
   d. Grid and snap
   e. Move to new page
   f. Show page

4. Text menu
   a. Get text files
   b. Save text files
   c. Remove text
   d. Copy text to clipboard
   f. Insert text
5. Font menu
   a. Select fonts
6. Style menu
   a. Bold, italic, normal
   b. Point size
7. Baselines menu
   a. Adjust single
   b. Adjust column
   c. Adjust above
   d. Adjust below
   e. Change leading
8. Art menu
   a. Get and save art files
   b. Erase art
   c. Copy art to clipboard
   d. Insert art
   e. Flip art
   f. Change art
   g. Magnify screen locations

C. Side tools

1. Text tool
2. Graphics text tool
3. Hand tool
4. Selection tool
5. Straight line tool
6. Box drawing tool
7. Pencil tool
8. Eraser tool

UNIT 13: Desktop Publishing Operations II

A. Overlays

1. The Graphics Overlay
   a. Selection
   b. Non active gray area

2. Side Tools
   a. Text Tool (Default Position)
   b. Graphic Tools
      Graphic Overlay
      Hand Tool
      Selection Tool
      Straight Line Tool
      Box Tool
      Pencil Tool
      Eraser Tool
      Line Width Options
3. The Text Overlay
   a. The character buffer
   b. The text clipboard
   c. Cut, copy, and paste
   d. Saving text
   e. Importing text from word processors
      ASCII files

B. Graphic Files

1. Art files
   a. Clip art
   b. Original art
   c. Saving an ART file
2. Art pages
   a. MAC files
   b. Selecting images from a MAC
   c. Creating ART files from MAC images
3. Placing images into a publication
   a. Get art from the Art menu
   b. Drag into proper location
4. Picture wrap
   a. Page menu
5. Graphic text
   a. Graphic text side tool
   b. Logos and banners
   c. Headers and footers
6. Editing images
   a. Cut, copy, and duplicate
      Moving between publications
      the graphics overlay
   b. Flip horizontal or vertical
   c. Invert
      White text on a black background
   d. Resizing graphics
   e. Magnify
      Mouse operation with magnify
   f. Erasing images

7. Selecting images
   a. Side tools
   b. Moving images
8. Drawing lines
   a. Straight line tool
   b. Boxes
   c. Line widths
   d. Freehand lines
      Pencil tool

UNIT 14: Laying Out a Desktop Publication

A. Publication process

1. Prepare text files
2. Prepare graphic files
3. Define the page
4. Place and edit text
5. Adjust the layout (rearrange the baselines)
6. Add headlines and change fonts
7. Add graphics, rearrange text if necessary
8. Add graphic elements such as lines and boxes

B. Layout Definition

1. The arrangement of text and graphics on a page that create a sense of order and balance
   a. Thumbnails
   b. Baselines
2. Page Definition
   a. Columns (1 to 4)
   b. Margins (Default per printer spec)
      Right
      Left
      Bottom
      Top
   c. Leading (Adjust for smallest font size)
   d. Gutter
   e. Define page at start of process
      Command destroys any existing baseline changes
3. Baseline adjustment
   a. Do after defining page
   b. Baseline menu options
      Single
      Column
      Above
      Below

4. Limitations
   a. Vertical movement limited to one baseline height
   b. Horizontal baselines may overlap but text will appear garbled
5. Zeroing a baseline
   a. Grab handle and move over opposite handle
   b. Causes text to flow past the baseline
   c. Enables columns of unequal width to exist
   d. Enables the apparent combination of columns on the same page
6. Text alignment (Baseline menu)
   a. Left
   b. Center
   c. Right
   d. Full
   e. Change leading
      May not be made smaller than that selected in the page definition
7. Selecting fonts
   a. Done with the style menu
   b. Baselines adjust for the largest size in a line
   c. Normal
   d. Bold
   e. Italic
8. Picture wrap
   a. Page menu selection
   b. Causes text to flow around an image
   c. Works with currently selected image
   d. Text flows to only one side of a selected image
9. Use Rulers
   a. Page menu option
10. Move in steps
   a. Equivalent to ACAD's snap

UNIT 15: Desktop Publication Design

The purpose of graphic design is to make it as easy as possible for readers to understand your message.

A. Plan ahead

1. Keep it simple
   a. Echo one or two visual effects throughout the publication
   b. Strive for a clean uncluttered look
2. Do your homework
   a. Know who the audience will be
   b. Know the publication's objective
   c. Know the document's basic format
   d. Know how the document will be distributed

3. Make a thumbnail
   a. Make one for each page
   b. Make it to the same proportions as the finished document
   c. Know the format - how many columns - where will the headlines go - graphics - captions

B. Use a logical sequence

1. Select a dominant element
   a. Could be a headline or
   b. Could be a graphic
2. Arrange the other items in order of importance
3. Use lines and boxes to guide the readers eye
   a. Do not over use graphic effects

C. Select fonts for a purpose

1. Fonts can make a piece look traditional or modern, simple or complex, serious or whimsical
   a. Use 9 to 12 point serif fonts for body type
   b. Use 14 to 18 point san serif fonts for headlines
   c. Plan for headlines to stretch across all columns in an article
2. Only use two different fonts in a document
   a. Use different styles i.e. bold or italics to create different levels of emphasis
   b. Don't choose two similar fonts for the same document

D. Examine the final document

1. Remove any redundant or insignificant elements
   a. Add white space by increasing margins, adding space between headings and text, or increasing the leading between baselines
2. Make sure the most important idea stands out
   a. Consider increasing the type size or
   b. Add a line or box for emphasis

3. Is the layout balanced the way that you intended
4. Make sure all of the elements fit together
   a. Modify or eliminate any jarring elements

E. Consider working with templates

1. Know what templates are available for your package

UNIT 16: Desktop Design Principles

A. Basic Concepts

1. Experiment
   a. Successful designs are usually the result of trial and error

2. Relate elements of graphic communications to their surroundings appropriately
   a. Elements need to be in proper proportion
   b. Appropriateness also relates to the audience and content
   c. Two tests for appropriateness
      Does it further the documents purpose?
      Is it suitable for the audience?
3. Make consistency a goal
   a. Do not change type style or size without reason
4. Do not force style
   a. Style is an outgrowth of your particular way of achieving consistency and appropriateness
5. Avoid static balance
   a. Unequal left/right or top/bottom balance helps provide movement
6. Organize each page around a single dominant element
   a. Avoid the confusion that results from equal sized graphic elements
7. Be aware that readers normally view pages in two page spreads

B. Establish a Format

1. Start by creating a grid
   a. A grid is a series of nonprinting horizontal and vertical lines
   b. A three column grid is most useful
2. Standardize the margins
   a. Margins set the publications off from everything else
   b. Be consistant with page numbers and other information within the margins
3. Borders provide a visual idenity
   a. For a dignified and scholarly look, the same border can be used on all four sides of a page
   b. The top and sides of a page can have different borders
   c. Sometimes different borders are used on the top and bottom of a publication
   d. For a contemporary look, use borders that do not extend the full width of a page
4. Use columns
   a. A column should contain about two alplabets
   b. Columns do not have to be the same width
   c. Justified columns add formality
   d. Unjustified columns are easy to read
5. Organize the page with rules
   a. Vertical rules separate columns while horizontal rules separate articles within a column
6. To keep the reader informed, use headers and footers
7. Select type to add personality to the publication
   a. Avoid typefaces that draw attention to themselves
   b. As the cross lines contribute to readability, use it for body type.
   c. Sans serif type is ideal for headlines
   d. Do not mix too many typestyles
8. Provide a strong masthead for your publication
   a. Must be sized to work with the headline
   b. Size and placement of logos should remain consistant among a firms publications
9. Use strong headlines
10. Place subhead so they provide a transistion from headlines to body copy

11. Always use captions for photos and artwork
    a. Should summarize important points made in the body copy

C. Add emphasis where necessary

1. Use large type size to emphasis important ideas
2. Vary typestyles to emphasis important ideas
3. Use white space to make design elements stand out
    a. Framing a page with white space strengthens the message by focusing the readers attention on the words.
    b. Keep white space to the outside
    c. White space can balance large photographics and blocks of copy
4. Use reverse type to call out elements of the page
    a. Reverse is most effective with san serif fonts
5. Use screens to attract attention
    a. Screens support sidebars well
6. Use boxes to accentuate text or graphics
    a. Shadows can be used with boxes to draw attention
7. Use graphics to highlight ideas
    a. Crop photos to accentuate the most important ideas
    b. Illustrations can echo the voice of a publication
    c. Charts and graphs bring numbers to light
8. Use pull quotes and cut lines to strengthen ideas
    a. Pull quotes summarize surrounding material and draw attention

D. Finish the document

1. Always proofread
2. Check leading
3. Avoid widows and orphans

COURSE GUIDE

CORPORATE ELECTRONIC PUBLISHING SYSTEMS

COURSE GUIDE

UNIT 1

UNIT TITLE: Cultural Influence of Graphic Communication

UNIT CONTENTS:

A. Significant early events in communication

1. The Cairn
2. Pictures and symbols recorded on stone
3. Cuneiform punches - clay tablets - the world's first types
4. The development of crude paper
5. Picture - writing using symbols, pictures and heiroglyphics.
6. The evolution of the alphabet

B. Early attempts at printing

1. Printing from wood blocks
2. The development of books
3. The invention of movable type
4. The origin of type faces
   a. Roman type
   b. Italic types
   c. Gothic types
5. Early printing in Europe and the Americas

C. Significant events in the United States

1. The first printing press
2. The first book printed in the Colonies
3. The first paper mil
4. The beginnings of newspapers
5. Early typesetting

UNIT OBJECTIVES: Upon completion of this unit, the student will be able to:

1. Identify at least three significant early events in the evolution of graphic communications.
2. Discuss early attempts at printing in Europe and the United States.

MATERIALS REQUIRED:

Student's Laboratory Guide for Unit 1

PROCEDURES:

Lecture
Group discussion
Evaluaton
Instructor-directed activities
Independent student activity

LEARNING ACTIVITIES

1. Unit 1 material in Student's Laboratory Guide
2. Quiz on material covered

Unit 1

QUIZ

Multiple Choice: Please mark the correct response on the answer sheet.

1. In ancient times, heaps of stones raised to commemorate important events were called:

   a. "stone writings"
   b. cairns
   c. hieroglyphics
   d. cuneiforms

2. The forerunner of the modern book was:

   a. wood blocks
   b. stone tablets
   c. the papyrus scroll
   d. clay tablets

3. Although the Chinese were the first to attempt the use of movable type, the individual generally given credit for inventing movable type in the fifteenth century was:

   a. Johann Gutenberg
   b. Alois Senefelder
   c. Conrad Sweinhegm
   d. William Caxton

4. The individual given credit for introducing printing into England was:

   a. Geofroy Tory
   b. Benjamin Franklin
   c. William Caxton
   d. William Caslon

5. The group given credit for the invention of letters and the start of the alphabet as we know it today were the:

   a. Romans
   b. Greeks
   c. Chaldeans
   d. Phoenicians

6. In ancient times, clay tablets were imprinted with characters called:

   a. cairns
   b. cuneiforms
   c. papyrus
   d. punches

7. A crude kind of paper developed by the Egyptians was called:

   a. Egypaper
   b. parchment
   c. vellum
   d. papyrus

8. The hieroglyphics used by the Egyptians literally translated means:

   a. picture writing
   b. stone writing
   c. sacred writing
   d. high writing

9. One of the most notable and probably the most famous of all printers in the United States was:

   a. Benjamin Franklin
   b. William Badford
   c. Steven Daye
   d. John Cromberger

10. Early newspapers generally started controversies and among the earliest "bad boy" printers was James Franklin who strayed so far from the "acceptable" that he was sentenced to jail for a month. His paper proved to be quite a departure from what British authorities considered acceptable journalism. His paper was called:

    a. The "Pennsylvania Gazette"
    b. The "New England Courant"
    c. The "New York Tribune"
    d. The "Kent Times"

QUIZ

UNIT 1

KEY

1. b

2. c

3. a

4. c

5. d

6. b

7. d

8. c

9. a

10. b

UNIT 2

UNIT TITLE: Typefaces and Styles of Type

UNIT CONTENTS:

A. An introduction to typefaces
   1. The Communication Link- The human voice
   2. Psychology of a type face
   3. The aesthetics of type
   4. How to choose typefaces for publications
   5. Typeface classifications

B. Development of typefaces
   1. Designing a typeface
   2. How a typeface is created
   3. The steps in typeface development

C. Typeface Characteristics

   1. Distinguishing characteristics
   2. Type fonts
   3. Families of type
   4. The parts of letters and letter weights

D. Text type styles

   1. Historical Background of text type
   2. Uses of text type
   3. Samples of text type

E. Roman Type Styles

   1. Historical background of Roman face
   2. Uses of Roman face type
   3. Samples of Roman face type

F. Square - Serif Typestyles

   1. Historical background of Square-serif faces of type.
   2. Uses of square serif faces
   3. Samples of square-serif faces

G. Sans-Serif type styles

   1. Historical background of Sans-serif type faces
   2. Use of sans-serif type faces
   3. Samples of sans-serif type styles.

H. Script Type Styles

1. Historical background of script type faces
2. Uses of Script type faces
3. Samples of script type faces

I. Novelty Type Styles

1. Historical background of novelty type faces
2. Uses of novelty type faces
3. Samples of novelty type faces.

J. Using Styles of type

1. Consistency within publications
   a. Headlines
      1. Bold
      2. Shadow
      3. Outline
   b. Body Copy, Text Copy
      1. Plain
      2. Italic
      3. Underline
      4. Using font variations

UNIT OBJECTIVES: Upon completion of this unit the student will be able to:

1. List and Identify six typeface Classifications
2. List and discuss five factors to consider when choosing a typeface
3. List and describe the six parts of letters
4. List the five common letter weights
5. List uses for the typefaces of the six major type styles.

MATERIALS REQUIRED:

Student's Laboratory Guide for Unit 2

PROCEDURES:

Lecture
Group Discussion
Evaluation
Instructor Directed Activities
Independent Student Activity

LEARNING ACTIVITIES:

Assign Unit 2 material in Student's Laboratory Guide
Quiz on material covered.

UNIT 2

QUIZ

Multiple choice. Please mark the correct response on the answer sheet provided.

1. The typeface is the printed record of:
   a. Mankind
   b. The human voice
   c. Ancient Egyptians
   d. Ancient Orientals

2. Which are the most important factors to consider when choosing a typeface?
   a. legibility and readability
   b. appropriateness and reproductibility
   c. practicality and readability
   d. all of the above

3. What two letters will a type designer begin with when attempting to design a new type.
   a. A and T
   b. A and Z
   c. N and O
   d. R and S

4. The wide parts of letters that can be horizontal, vertical or diagonal are called:
   a. serifs
   b. descenders
   c. ascenders
   d. thick strokes

5. The little extra strokes at the end of the main character strokes in many kinds of type are called:
   a. serifs
   b. thin strokes
   c. thick strokes
   d. extenders

6. The top portion of the vertical stroke that extends above the main letter is called:
   a. top extender
   b. ascender
   c. top extensions
   d. descenders

7. The central area of letters that have no image can be completely enclose such as in a b or partially enclosed as in an N is called:
   a. the counter
   b. the bowl
   c. the blank
   d. the area

8. The loop or rounded portion of a letter such as a p or b is called the:
   a. circular
   b. curve
   c. bowl
   d. counter

9. The portion of the vertical stroke which extends below the main portion of the letter, as in p and q is called the:
   a. lower extensions
   b. descender
   c. lower extender
   d. ascenders

10. The narrow parts of the letters that can be horizontal, vertical or diagonal are called:
   a. serifs
   b. ascenders
   c. descenders
   d. thin strokes

11. Groups of letters that do not have serifs is called:
   a. no serif
   b. sans serif
   c. serif free
   d. extra serif

12. An assortment of type on any one kind, style and size is called a. family
   b. font
   c. series
   d. mixture

13. Several sizes of one kind and style of type available is called a type:
   a. series
   b. family
   c. font
   d. mixture

14. Several different styles of type under the same basic name is called a:
    a. series
    b. family
    c. font
    d. mixture

15. The only typeface classification to have the distinction of being the only one developed in the United States is:
    a. the Novelty style
    b. the Script style
    c. the Square-Serif style
    d. the text type style

QUIZ

UNIT 2

KEY

1. b
2. d
3. c
4. d
5. a
6. b
7. a
8. c
9. b
10. d
11. b
12. b
13. a
14. b
15. a

UNIT 3

UNIT TITLE: Tools and Methods of Graphic Design

UNIT CONTENTS:

A. Measuring type

1. Basic units of measurement
   a. points
   b. picas
   c. agate
   d. Metric
   e. ens and ems
2. Guide lines for measuring type
3. Measuring tools
4. Type composition measurement
   a. Letters and letter spacing
   b. word spacing
   c. Line spacing
   d. leading
   e. Line length

B. Drawing equipment and design instruments

1. Drawing boards
2. T-squares and triangles
3. Rules and scales
4. Drawing curves
5. Pencils
6. Inking pens
7. Ruling pens
8. Airbrushes
9. Paint brushes and paints
10. Knives
11. Masking film
12. Charcoal or chalk
13. Proportion scale

C. Copyfitting Procedure

1. Definition of Copy fitting
2. Methods of Copy fitting
   a. Character count method
   b. Character space method

UNIT OBJECTIVES: Upon completion of this unit, the student will be able to:

1. Identify measuring tools necessary to measure type and be able to use these tools efficiently.
2. Identify equipment and design instruments used in the graphic design industry.
3. Solve copyfitting problems.

MATERIALS REQUIRED:

Student's Laboratory Guide for Unit 3

PROCEDURES:

Lecture
Evaluation
Group Discussion
Instructors Directed Activities
Independent Student Actitity

LEARNING ACTIVITIES:

Assign Unit 3 material in Students Laboratory Guide

Quiz on materials covered.

UNIT 3

QUIZ

Multiple Choice: Please mark the correct response on the answer sheet.

1. How many picas are there in one inch?
   a. four
   b. twelve
   c. six
   d. seventy-two

2. How many points are there in one inch?
   a. four
   b. twelve
   c. six
   d. seventy-two

3. How many points in one pica?
   a. twelve
   b. four
   c. six
   d. seventy-two

4. The unit of measurement used to designate typeface sizes and the distance between lines of type are:
   a. picas
   b. agates
   c. points
   d. scores

5. The unit of measurement used to show line length, page margins, and body type depth are:
   a. picas
   b. points
   c. scores
   d. agates

6. The basic measuring tool is called a:
   a. ruler
   b. pica ruler
   c. line guage
   d. line ruler

7. Newspapers commonly sell their advertising space by the:
   a. ad size
   b. division of pages
   c. page
   d. column inch

8. The spacing between lines is called:
   a. spacing
   b. leading
   c. line spacing
   d. points

9. Some newspapers measure their type in
   a. inches
   b. agates
   c. points
   d. picas

10. A procedure used for figuring the amount of space that must be saved in a layout for text is called
   a. proportioning
   b. copyfitting
   c. angling
   d. space adjustment

QUIZ - UNIT 3

KEY

1. c
2. d
3. a
4. c
5. a
6. c
7. d
8. b
9. b
10. b

UNIT 4

UNIT TITLE: Introduction to Graphic Design

UNIT CONTENTS:

A. Pre-design planning

1. Objective of the design
   a. Purpose of the design
   b. Why is design being done?
   c. What is the reader being influenced to do?
2. Target Audience
   a. Demographics
      (1) Where they live
      (2) Income level
      (3) Ages
      (4) Educational level
      (5) Sex (male or female)
      (6) Particular occupation
      (7) Cultural background
      (8) Other
   b. Psychographics
      (1) Opinions
      (2) Interests
      (3) Attitudes
      (4) Goals (Immediate and Long Range)
3. Personality of the design
   a. Image of design
      (1) classy
      (2) sophisticated
      (3) gaudy
      (4) dignified
      (5) humorous
      (6) serious
      (7) formal
      (8) informal
   b. The paper type
   c. Topography and illustrations

4. Dominate design elements
   a. photographs
   b. illustrations
   c. cartoons
   d. combinations
5. Budget limitations
6. Layout format
   a. Booklet
   b. Folder
   c. Bulletin
   d. Brochures
   e. Single sheet
   f. Book
   g. Approximate number of pages
      (1) Printed one side or both
      (2) One or several pages
7. Approximate finished size of design
8. Traits of existing designs to be matched or beat
9. The affect of the distribution method on format or design
10. Reproduction method
    a. Copy machine
    b. Laser printer
    c. Small press
    d. large press
11. Finishing and Bindery Requirements
    a. Trim requirements
    b. Perforated
    c. Scored
    d. Folded
    e. Bindery method
12. Time needed to complete design
    a. Staff time available for production
    b. Estimated hours needed for completion
13. Approximate date of completion
14. Estimated cost for the design

B. Layout Procedure

1. Thumbnail
2. Rough
3. Comprehensive layout

C. Design and Layout Considerations

1. The importance of planning
2. The importance of layout and design in obtaining a quality product
3. The importance of readability
4. The importance of simplicity
5. The importance of type and typography knowledge.
6. The importance of point system knowledge.
7. The importance of color and its effect on people.
8. The importance of basic design principles.

UNIT OBJECTIVES: Upon completion of this unit the student will be able to:

1. List at least 10 questions that must be considered before a design is begun
2. List the elements of a layout procedure.
3. Identify 8 important layout and design considerations.

MATERIALS REQUIRED:

Student's Laboratory Guide for Unit 4

PROCEDURES:

Lecture
Evaluation
Group Discussion
Instructor Directed Activities
Independent Student Activity

UNIT 4

QUIZ

Multiple choice: Please mark the correct response on the answer sheet.

1. The combination of ideas used in planning and designing a product is called a:
   a. comprehensive
   b. rough
   c. thumbnail
   d. layout

2. Small sketches roughed out in pencil are called
   a. roughs
   b. thumbnails
   c. layouts
   d. charcoals

3. The size of the rough layout in relation to the finished product is usually:
   a. the same size
   b. one-half the finished product
   c. one-fourth the finished product
   d. twice the size of the finished product

4. The rough layout is made up of the:
   a. thumbnail
   b. final
   c. comprehensive
   d. sketch

5. The general arrangements of the thumbnail sketch and the rough layout make up the:
   a. customer copy
   b. customer proof
   c. typography
   d. comprehensive layout

6. The form that should be completed to help formulate the ideas of the person originating the printed job is a:
   a. job planning form
   b. job specifications form
   c. prelayout planning form
   d. job ticket

7. The precision layout which permits the customer to see what the final product will look like is:
   a. proof
   b. comprehensive
   c. final proof
   d. customer copy

8. Important elements of pre-design planning are:
   a. personality of design and target audience
   b. budget limitations and layout format
   c. reproduction method and dominate design elements
   d. all of the above

9. Arrangement of units into a usable format (units include headings, sub-headings, text matter, illustrations and photographs) is called:
   a. a rough
   b. a layout
   c. a thumbnail sketch
   d. a final

10. The preparation of a complete set of layouts requires:
   a. thumbnail sketches
   b. rough layout
   c. comprehensive layout
   d. all of the above

QUIZ - Unit 4

KEY

1. d

2. b

3. a

4. a

5. d

6. c

7. b

8. d

9. b

10. d

UNIT 5

UNIT TITLE: Principles of Design

UNIT CONTENTS:

A. Elements of Design

1. Element of Lines
   a. Continuity, movement or belonging
   b. Lines as a message
2. The element of form
3. The element of mass
4. The element of texture
5. The element of hue
6. The element of value
7. The element of chroma
8. The element of space.
   a. Plane
   b. Multiplane
   c. Continuous

B. Design Guidelines

1. Space
2. Page proportion
   a. The golden proportion
   b. Common page proportions
   c. Proportions not used
3. Page Balance
   a. Informal balance
   b. Formal balance
   c. Optical centers of pages
4. Contrast
   a. Methods of emphasizing words with type
   b. The elements of a page
   c. The importance of imagination
   d. The use of color
5. Rhythm
   a. Eye direction and eye movement control
   b. Achievement of rhythm
      (1) Graduated tone
      (2) Interrupted
      (3) Staccato
      (4) Repetition formats
      (5) Recurring image elements
         (a) Shapes
         (b) Sizes
         (c) Directions
         (d) Tones

6. Unity
   a.Elements tied together
   b. Patterns for unity
7. White space
   a. Readibility
   b. Increased communication
8. New designer mistakes
   a. Say-nothing illustrations that are included just to fill space
   b. Cluttered illustrations
   c. Attempts to be different
   d. Failure to complement the accompanying text
   e. Unorganized illustrations
   f. Symbols used that have no meaning or that cannot be easily understood. Overly symbolic illustrations.

C. The use of creativity in design

1. Avoid being critical or negative about the design - Think positive
2. Observe what other successful designers do and apply their principles
3. Brainstorm with others
4. Write down ideas when they are fresh.
5. Give incubation time to ideas
6. Do lots of thumbnails to stimulate thinking.
7. Don't procrastinate - Don't put off getting started
8. Use past work to help with ideas.
9. Concentrate on the most dominate element in the layout.

D. Color for designing

1. Four questions designers consider
   a. How is color produced in printed products?
   b. What influences the appearance of color?
   c. How does colored printing ink work?
   d. How does paper influence color?
2. The color wheel
   a. Primary colors
   b. Secondary colors
   c. Intermediate colors
3. Light and color quality
4. Color harmony
   a. Monochromatic color harmony
   b. Analogous color harmony
   c. Complimentary color harmony
   d. Triadic color harmony
5. Psychology of color
   a. Warm colors
   b. Cool colors
6. Use of color for identification

UNIT OBJECTIVES: Upon completion of this unit, the student will be able to:

1. Identify at least 4 elements of design
2. Identify the six design principles
3. List four common mistakes new designers make
4. Identify at least two questions designers consider when using color in a design
5. List the primary, secondary and intermediate colors.
6. Name three uses of color for identification purposes.

MATERIALS REQUIRED:

Student's Laboratory Guide for Unit 5

PROCEDURES:

Lecture
Evaluation
Group discussion
Instructor directed activities
Independent student activity

LEARNING ACTIVITIES:

1. Assign Unit 5 material in Student's Laboratory Guide
2. Quiz on material covered.

UNIT 5

QUIZ

Multiple Choice: Please mark the correct response on the answer sheet.

1. Two dimensional visual objects are known as:
   a. space
   b. shapes
   c. points
   d. lines

2. The relation of one part to another part, or to the whole; or, the relation of one image element to another; or, the relation of one element to the whole ad or page or publication is called
   a. balance
   b. harmony
   c. unity
   d. proportion

3. In laying out a page the proportion of three parts to five parts is called the:
   a. Golden rectangle
   b. Greek rule
   c. Architects rule

4. A pleasing relationship among the image elements along with good page proportion is called:
   a. unity
   b. space
   c. harmony
   d. balance

5. Image elements balanced on either side of an imaginary center line running from the top to the bottom of a page is called:
   a. formal balance
   b. informal balance
   c. perfect balance
   d. see-saw balance

6. A free and easy design that is off-center is called:
   a. formal balance
   b. informal balance
   c. imperfect balance
   d. perfect balance

7. Eye movement is obtained with good:
   a. harmony
   b. proportion
   c. balance
   d. unity

8. The movement or fluctuation marked by the regular recurrence or flow of related parts is called:
   a. unity
   b. rhythm
   c. balance
   d. harmony

9. "All display is no display" is a term in design describing:
   a. harmony
   b. emphasis
   c. contrast
   d. balance

10. Three primary colors are:
    a. yellow, red, green
    b. yellow, red, blue
    c. black, white, red
    d. blue, red, green

11. Secondary colors are obtained by mixing equal amounts of:
    a. two primary colors
    b. three primary colors
    c. black and a primary color
    d. white and a primary color

12. The color orange is obtained by mixing:
    a. red and bluew
    b. red, yellow and black
    c. red and yellow
    d. red, blue and black

13. The color violet is obtained by mixing
    a. red and blue
    b. red and yellow
    c. red, yellow and black
    d. red, blue and black

14. Three secondary colors are:
    a. red, yellow, blue
    b. green, violet, orange
    c. green, violet, purple
    d. purple, green, orange

15. The presence of all colors creates:
    a. light
    b. darkness
    c. white
    d. black

16. The absence of all colors creates:
    a. light
    b. darkness
    c. black
    d. white

17. Adding black to a color creates a:
    a. tint
    b. shade
    c. shadow
    d. rinse

18. Yellow, orange and red are considered
    a. cool colors
    b. secondary colors
    c. primary colors
    d. warm colors

19. Green, blue and violet colors are considered
    a. cool colors
    b. secondary colors
    c. primary colors
    d. warm colors

20. In the modern use of color, red usually means:
    a. proceed
    b. danger
    c. enter
    d. retreat

QUIZ - UNIT 5

KEY

1. b
2. d
3. a
4. c
5. a
6. b
7. d
8. b
9. c
10. b
11. a
12. c
13. a
14. b
15. c
16. c
17. b
18. d
19. a
20. b

UNIT 6

UNIT TITLE: The Layout Process

UNIT CONTENTS:

A. Art and copy preparation
   1. Line copy
   2. Type matter
   3. Continuous tone copy and screens
   4. Illustrations and type considerations
   5. Scaling copy for design
   6. Cropping to fit space
   7. Register marks
   8. Trim marks
   9. Margins

B. Thumbnail sketches
   1. Materials needed
   2. Methods and procedures of preparation

C. Rough layouts
   1. Materials needed
   2. Methods and procedures of preparation

D. Comprehensive Layouts
   1. Materials needed
   2. Methods and procedures of preparation.

E. Dummy layouts
   1. Page order
   2. Basic page content
   3. Folding order of the signature

F. Mechanical Layouts

UNIT OBJECTIVES: Upon completion of the unit the student will be able to:

1. Identify the following terms and describe how each is used in layout.
   a. continuous tone copy
   b. illustrations
   c. screens
   d. register marks
   e. crop marks
   f. trim marks
   g. margins
   h. line copy
   i. scaling copy

2. Define thumbnail sketches, rough layouts, comprehensive layouts, dummy layouts and mechanical or final layouts.

MATERIALS REQUIRED:

Student's Laboratory Guide for Unit 6

PROCEDURES:

Lecture
Group Discussion
Evaluation
Instructor directed activities
Independent student activity

LEARNING ACTIVITIES:

Assign Unit 6 material in Students Laboratory Guide
Quiz on material covered.

UNIT 6

QUIZ

Multiple choice. Please mark the correct response on the answer sheet.

1. The process of marking a photograph to indicate what portion to use is called:
   a. composition
   b. cropping
   c. scaling
   d. sizing

2. What marks are used to position one copy with another?
   a. register
   b. trim
   c. crop
   d. scale

3. Copy whose image is solid is called:
   a. continuous tone
   b. halftone
   c. proof
   d. line

4. Copy ready to be printed is called:
   a. print ready
   b. color ready
   c camera ready
   d. photo ready

5. Which one of the following is not line copy:
   a. charts
   b. halftones
   c. type matter
   d. hand lettering

6. An example of continuous tone copy is:
   a. line
   b. illustrations
   c. charts
   d. halftone

7. What is the main purpose of a dummy layout?
   a. show page order
   b. show basic page content
   c. give folding order of the signature
   d. all of the above

8. A completed paste-up or a diffusion transfer copy of the paste-up is called a:
   a. mechanical layout
   b. finished layout
   c. final layout
   d. all of the above

9. A large sheet of paper printed in on both sides and folded in proper order is called a:
   a. print
   b. dummy
   c. signature
   d. final

10. An extension of one or more of the thumbnail sketches is called:
    a. comprehensive
    b. rough layout
    c. mechanical
    d. dummy

QUIZ - UNIT 6

KEY

1. b
2. a
3. d
4. c
5. b
6. d
7. d
8. d
9. c
10. b

UNIT 7

UNIT TITLE: Fundamentals of Computer Graphic Workstations

UNIT CONTENTS

A. Workstation Fundamentals

1. Hardware components overview
   a. Video displays
   b. Video controllers
   c. Computer systems
   d. Printers
   e. Input devices
2. Compatibility
   a. Physical
   b. Electrical
   c. Standards and conventions

B. Video displays

1. CRT technology
2. Raster technology
3. Alternate technologies

C. Video controller boards

1. PC standards
   a. CGA
   b. MDA and HGC
   c. EGA
   d. VGA
2. Non-standard
   a. Full page
   b. Interlace vs noninterlace

D. Computers

1. Vacuum tubes -- the first generation
2. Transistors -- the second generation
3. Integrated circuits -- the third generation
4. Types of computers
   a. Microcomputers
   b. Minicomputers
   c. Mainframes

E. Printers

1. Laser
   a. Postscript
   b. Non-poscript
2. Dot matrix
3. Typesetters
4. Other output devices

F. Input devices

1. Mice
2. Manual digitizers
3. Electronic digitizers
4. Scanners

UNIT OBJECTIVES

Upon completion of this unit, the student will be able to:

1. List and define the major components of a CAP workstation.
2. Explain the purpose of each workstation component.
3. Define the major computer classifications and explain how each evolved.
4. Identify the two types of laser printers and explain their applications.
5. List the major devices used for input and explain their advantages and disadvantages.
6. Define and discuss the differences between digitizing and scanning.

MATERIALS REQUIRED

Student's Laboratory Guide for Unit 7.

PROCEDURES

Lecture
Group discussion
Evaluation
Instructor-directed activities
Independent student activity

LEARNING ACTIVITIES

1. Unit 7 material in Student's Laboratory Guide
2. Quiz on material covered

UNIT 7

QUIZ

Multiple Choice: Please mark the correct response on the answer sheet.

1. A workstation's performance is only as good as its weakest component.

   A. True.
   B. False.

2. The purpose of the video display is to provide _____ about how a design is developing.

   A. Feedback.
   B. Information.
   C. Guidance.
   D. All of the above.

3. What device is the interface between the computer system and the video display?

   A. Output devices.
   B. Video Controller.
   C. Input devices.
   D. Central Processing Unit.

4. What kind of information do computer systems operate on?

   A. Hexadecimal.
   B. Soft.
   C. Binary.
   D. Octal.

5. Most video controllers are replaceable or expandable.

   A. True.
   B. False

6. What is the smallest element that can be displayed on the video screen called?

   A. Pixel.
   B. Monument.
   C. Raster scan.
   D. Bit.

7. The scan rate of the video monitor must match that of the signals furnished by the video controller.

   A. True.
   B. False.

8. When a video display is used in interlace mode, what kind of phosphor must the video display use?

   A. Tricolored.
   B. Fast triggered.
   C. Long persistence.
   D. Slow burning.

9. What invention marks the beginning of the revolution in microelectronics?

   A. Vacuum tubes.
   B. Integrated Circuits.
   C. ENIAC.
   D. Transistors.

10. What technology is used by the third generation of computers?

    A. Vacuum tubes.
    B. Integrated Circuits.
    C. ENIAC.
    D. Transistors.

11. In a computer system, where is archival information kept?

    A. Main memory.
    B. Mass memory.
    C. Word register.
    D. Video memory.

12. What is the most widely used CAP output device?

    A. Film recorder.
    B. Laser printers.
    C. Pen plotters.
    D. Electrostatic plotters.

QUIZ - UNIT 7

KEY

1. A. True.
2. A. Feedback.
3. B. Video Controller.
4. C. Binary.
5. A. True.
6. A. Pixel.
7. A. True.
8. C. Long persistence.
9. D. Transistors.
10. B. Integrated Circuits.
11. B. Mass memory.
12. B. Laser printers.

UNIT 8

UNIT TITLE: Computer Graphics Overview

UNIT CONTENTS

A. Fundamental Terminology

1. Pixels and display resolution
   a. The display layout
   b. Locating pixels
   c. A video worksheet
2. Hardware/Software interactions
   a. Aspect ratios
   b. Monitor adjustments

B. Application programs

1. Overview
   a. What differentiates a CAD program from a paint program.
   b. Vectors vs bit-maps
   c. Graphic primitives
   d. Coordinate systems
2. Computer Aided Design
   a. Menu systems
   b. Drawing editor environments
   c. Editing Commands
   d. Hatch, layer, block, and inset
   e. Graphic arrays
3. Paint programs
   a. Drawing cursors
   b. Toolboxes
   c. Dialog boxes
   d. Double clicking
4. Presentation graphics
   a. Types of Lotus graphics
   b. Harvard presentation graphics

UNIT OBJECTIVES

Upon completion of this unit, the student will be able to:

1. Define basic computer graphic terms such as:
   Pixel
   Resolution
   Aspect ratio
   Graphic primitive

2. Turn a pixel on and off from a BASIC program.
3. Make a computer graphic drawing.
4. Define the AutoCAD drawing environment and list 5 tools that are available there.
5. Name the first major interactive computer graphic system and list three reasons for its significance.
6. Name the major computer graphic applications and list three factors that differentiate them.

MATERIALS REQUIRED

Student's Laboratory Guide for Unit 8.
Computer Graphic Software
- BASIC
- AutoCAD
- LogiPaint
- Lotus
- Harvard Publisher

PROCEDURES

Lecture
Group discussion
Evaluation
Instructor-directed activities
Independent student activity

LEARNING ACTIVITIES

1. Unit 8 material in Student's Laboratory Guide
2. Quiz on material covered

UNIT 8

QUIZ

Multiple Choice: Please mark the correct response on the answer sheet.

1. Name the computer graphic term for the smallest point that can be lit on the face of a video monitor.

   A. Grid
   B. Picture point
   C. Pixel
   D. Grain

2. The more pixels that are available on a video screen the higher the _____?

   A. Price
   B. Resolution
   C. Weight
   D. RQ

3. Pixel locations are measured from the reference point (0,0) which is located in which corner of the video screen?

   A. Bottom right
   B. Bottom left
   C. Top right
   D. Top left

4. A computer graphic system consists of both hardware and _____ ?

   A. Software
   B. Firmware
   C. Hardware
   D. Vaporware

5. In a computer system, what controls the hardware?

   A. Software
   B. Firmware
   C. Hardware
   D. Vaporware

6. What language can computers understand directly?

   A. High language
   B. Assembler
   C. BASIC
   D. Machine

7. What defines the drawing environment in a CAD system?

A. The syntax
B. The application
C. The drawing editor
D. The operator

8. In contrast to hardware tools used by the traditional draftsman, the tools used by a CAD operator are _____ ?

A. Soft
B. Hard
C. Difficult
D. Easy

9. What kind of coordinate system does AutoCAD work with?

A. Conventional
B. Square
C. Four dimensional
D. Cartesian

10 -- 14. Match the toggle functions with the function keys.

A. SNAP	__ F1
B. COORDINATES	__ F6
C. ORTHO	__ F7
D. FLIP	__ F8
E. GRID	__ F9

QUIZ - UNIT 8

KEY

1. C. Pixel
2. B. Resolution
3. B. Bottom left
4. A. Software
5. A. Software
6. D. Machine
7. C. The drawing editor
8. A. Soft
9. C. Four dimensional
10. A. SNAP __F9
11. B. COORDINATES __F7
12. C. ORTHO __F8
13. D. FLIP __F1
14. E. GRID __F6

UNIT 9

UNIT TITLE: Paint Program Overview

UNIT CONTENTS

A. Starting PaintShow

1. The PaintShow Environment
   a. The tool box
   b. The Line-Width Palate
   c. The Pattern Palate
   d. The Menu Bar
   e. The Drawing Board
2. The PaintShow Interface
   a. Working with a mouse
      Screen cursor positioning
      Clicking
      Double clicking
   b. Dialogue boxes

B. Working with the tool box

1. Drawing with the pencil
   a. Positioning the screen cursor
   b. Operating the mouse
2. The shapes
   a. The filled rectangle
   b. Pattern selection
3. Color Selection
   a. Mouse operation
   b. Line-width palate
4. Drawing erasure
   a. Pull down menus
   b. The file menu
5. Text
   a. The text tool
   b. Entering text
6. Selecting and Moving
   a. The selection tool
   b. The selection box
   c. The hand cursor
7. Picture saving
   a. The file menu
   b. The Save option
8. Loading a picture
   a. The Load option
   b. The Show Screen option

9. Exiting PaintShow
   a. The Quit option

UNIT OBJECTIVES

Upon completion of this unit, the student will be able to:

1. Load and start PaintShow.
2. Name and define the five parts of the PaintShow environment.
3. Draw with the pencil tool.
4. Select drawing shapes.
5. Select fill patterns.
6. Erase drawings using the file menu.
7. Input text.
8. Select and move information within a picture.
9. Save a picture.
10. Load a picture.
11. Exit PaintShow properly.

MATERIALS REQUIRED

Student's Laboratory Guide for Unit 9.
Paint software such as:
- Logitech's PaintShow
- Mouse Systems PC Paint +
- Microsoft's Windows Paint

Computer System suitable for paint software

PROCEDURES

Lecture
Group discussion
Evaluation
Instructor-directed activities
Independent student lab activity

LEARNING ACTIVITIES

1. Unit 9 material in Student's Laboratory Guide
2. Quiz on material covered

UNIT 9

QUIZ

Multiple Choice: Please mark the correct response on the answer sheet.

1. What command do you enter to load PaintShow?

   A. Paint
   B. PaintShow
   C. Mouse
   D. GoPaint

2. How many separate areas are there in the PaintShow environment?

   A. Two
   B. Three
   C. Four
   D. Five

3. Which of the following is not one of the parts of the PaintShow environment?

   A. Menu bar
   B. Tool box
   C. Command area
   D. Drawing area

4. Which mouse button do you click to select a fill pattern?

   A. Left
   B. Middle
   C. Center
   D. Any of the above

5. Which mouse button do you click to select a line color?

   A. Left
   B. Middle
   C. Center
   D. Any of the above

6. Any color or pattern in the Pattern Palette can be selected as the current pen/border color.

   A. True.
   B. False.

7. In order to erase a drawing, what option do you select from the file menu?

   A. Save
   B. Load
   C. Erase
   D. New

8. The text cursor is identical to the mouse cursor.

   A. True
   B. False

9. After you click on the selection tool, you change the size of the selection rectangle by pressing and holding the mouse button.

   A. True
   B. False

10. When you are ready to leave PaintShow, you can just turn off the computer?

    A. True
    B. False

UNIT 9

KEY

1. A. Paint
2. D. Five
3. C. Command area
4. B. Middle
5. B. Middle
6. B. False
7. D. New
8. B. False
9. A. True
10. B. False

UNIT 10

UNIT TITLE: Paint Program Operation

UNIT CONTENTS

A. The Tool Box

1. Painting tools
   a. Pencil
   b. Brush
   c. Lines
      Line width selection
      Ortho
      Grid
   d. Line Fill
   e. Spray
      Select nozzles
   f. Area fill
      Stopping area fill
      The Undo command
2. The shapes
   a. Hollow
   b. Filled
   c. Squares and circles
3. Line Widths
   a. The line width palette
   b. Color selection
4. Fill patterns
   a. Alternate pattern selection
   b. Pattern editing
5. Positioning tools
   a. Scroll
   b. The scissors/selection tool
      Move
      Copy
6. The eraser
   a. Changing eraser size
   b. Magnify
7. Text
   a. Font size
   b. Style

B. Menu Bar Operation

1. Dialogue boxes
   a. Selecting options
   b. Cancel
2. File operations
   a. New picture
   b. Double clicking
   c. Saving a picture
      Default file name
   d. Printing a picture
      Portrait orientation
      Landscape orientation
      DPI options
   e. Loading a pattern
   f. Saving a pattern
   g. DOS shells
   h. Exiting PaintShow
3. Edit operations
   a. Clipboard Operations
      Cut
      Copy
      Paste
   b. Reverse
   c. Trace edges
   d. Flip
      Horizontal
      Vertical
   e. Rotate
4. Screen Tools
   a. Magnify
      Erase
      Paint
   b. Show Screen
   c. Show Page
      Repositioning the Drawing Board
   d. Grid
5. Fonts
   a. Font types
   b. Character styles
   c. Font sizes

C. Advanced topics

1. Slide shows
2. Catch screens

UNIT OBJECTIVES

Upon completion of this unit, the student will be able to:

1. Create simple PaintShow pictures.
2. Create samples pictures that use each type font and style.
3. Create a simple slide show.
4. Use the positioning tool to select, move, and copy parts of pictures.
5. Select and change pattern palettes.
6. Change line widths and patterns.
7. Magnify parts of the picture and edit the parts.
8. Select, save, and load a picture.
9. Double click to save keystrokes.
10. Print a picture in both landscape and portrait orientations.
11. Reverse colors as well as rotate and flip a picture.

MATERIALS REQUIRED

Student's Laboratory Guide for Unit 10.
Paint software such as:
- Logitech's PaintShow
- Mouse Systems PC Paint +
- Microsoft's Windows Paint

Computer System suitable for paint software

PROCEDURES

Lecture
Group discussion
Evaluation
Instructor-directed activities
Independent student lab activity

LEARNING ACTIVITIES

1. Unit 9 material in Student's Laboratory Guide
2. Quiz on material covered

UNIT 10

QUIZ

Multiple Choice: Please mark the correct response on the answer sheet.

1. What command do you enter to exit PaintShow?

   A. Exit
   B. Quit
   C. End
   D. Goexit

2. How many separate pull down menus are there in PaintShow?

   A. Two
   B. Seven
   C. Four
   D. Six

3. Which of the following is not one of PaintShow's pull down menus?

   A. Line palette
   B. File
   C. Edit
   D. Tools

4. Which pull down menu do you use when you want to magnify part of a drawing?

   A. Tools
   B. Edit
   C. File
   D. Size

5. How big is 36 pt type?

   A. One inch
   B. One half inch
   C. One quarter inch
   D. None of the above

6. When are dialogue boxes used in PaintShow?

   A. Whenever you issue any command
   B. When a command needs more information
   C. When you pull down the dialogue menu
   D. Never

7. What file option do you select to load an existing picture?

   A. Save
   B. Load
   C. Erase
   D. New

8. The pattern palette that is in PaintShow when you first load the program is the only palette that you can use.

   A. True
   B. False

9. Which mouse button do you use to select the line width?

   A. Right
   B. Left
   C. Middle
   D. Any of the above

10. What key do you press to stop an area fill?

   A. Ctrl-C
   B. Esc
   C. F1
   D. Scroll Lock

UNIT 10

KEY

1. B. Quit
2. D. Six
3. A. Line palette
4. A. Tools
5. B. One half inch
6. B. When a command needs more information
7. B. Load
8. B. False
9. B. Left
10. B. Esc

UNIT 11

UNIT TITLE: Desktop Publishing Overview

UNIT CONTENTS

A. Introduction

1. History
   a. Paul Brainerd - 1985
   b. The Apple turnkey system
   c. Recent developments
2. Benefits
   a. Reduction in payments to outside services
   b. Increased control over documents
   c. Increased standardization
   d. Reduced production time
   e. Increased choice in production quality (i.e. laser or typeset output).
3. Marketplace growth
   a. Problems of growth
   b. Users lacking publishing skills
   c. System integrators lacking computer skills

B. Desktop Publishing Workstations

1. Major Hardware components
   a. Digitizer
   b. Video section
   c. Pointing device
   d. Printer
   e. Computer
2. Major Software Components
   a. Word processor
   b. Graphics
   c. Paint programs
   d. Clip art
   e. Page composition language

C. The traditional publishing cycle

1. Proposal (who, what, where, when, and how much)
   a. Schedule
   b. Budget
   c. Staffing
   d. Audience
   e. Content
2. Manuscript and illustration generation

3. Editing
4. Typesetting
5. Layout
6. Printing

D. The Desktop publishing cycle

1. Proposal
2. Word and image processing
3. Publication design
4. Review
5. Printing

UNIT OBJECTIVES

Upon completion of this unit, the student will be able to:

1. State and explain the traditional publishing cycle.
2. Define 'Desktop Publishing' and explain how it differs from traditional publishing.
3. State the five major hardware components of a desktop publishing workstation.
4. State three major software components of a desktop publishing system.
5. State the projected growth rate for desktop publishing and two common problems that result from the rapid growth.
6. State and explain five areas that should be covered in a proposal.

MATERIALS REQUIRED

Student's Laboratory Guide for Unit 11.
Desktop Publishing Software such as:
First Publisher or
PageMaker
Support Software such as:
PaintShow
First Publisher Clip Art

PROCEDURES

Lecture
Group discussion
Evaluation
Instructor-directed activities
Independent student activity

LEARNING ACTIVITIES

1. Unit 11 material in Student's Laboratory Guide
2. Quiz on material covered

UNIT 11

QUIZ

Multiple Choice: Please mark the correct response on the answer sheet.

1. Who first used the term desktop publishing?

   A. Steve Jobs
   B. Ed Crowley
   C. Paul Brainerd
   D. Richard Nixon

2. Which of the following is not a benefit of desktop publishing?

   A. Reduced capital expenses
   B. Reduced payments to outside services
   C. Increased standardization
   D. Reduced production time

3. Rapid growth in the computer marketplace often results in problems such as untrained users and inexperienced system integrators.

   A. True
   B. False

4. Desktop publishing has major hardware and software components.

   A. True
   B. False

5. The proposal includes information on who the publication's audience is, what the content will be, where it will be distributed, when it will be produced, and how much it will cost.

   A. True
   B. False

6. What program provides the environment where the final document is produced?

   A. Word processor
   B. Page composition language
   C. Paint program
   D. Any of the above

7. What is the ability to interchange information among different programs called?

   A. ASCII
   B. Interoperatibility
   C. Fat bits
   D. Translation

8. In contrast to hardware tools used by traditional publishers, what are the tools used by a desktop publisher?

   A. Soft
   B. Hard
   C. Difficult
   D. Easy

9. The design phase of desktop publishing is all automatic as the computer does all of the necessary work.

   A. True
   B. False

Unit 11

KEY

1. C. Paul Brainerd
2. A. Reduced capital expenses
3. A. True
4. A. True
5. A. True
6. B. Page composition language
7. B. Interoperatibility
8. A. Soft
9. B. False

UNIT 12

UNIT TITLE: Desktop Publishing Operation

UNIT CONTENTS

A. Starting First Publisher

1. The First Publisher Environment
   a. The menu bar
   b. Side tools
   c. Elevator
   d. The text cursor
   e. The mouse cursor
2. The First Publisher interface
   a. Working with a mouse
      click
      drag
      grab
      select
   b. Dialogue Boxes
   c. Page elevator
3. Elements of a page
   a. Text overlay
   b. Graphics overlay
   c. Clipboards
4. Relevant file types
   a. Text files
   b. Graphic files
   c. ASCII files
   d. Publication files

B. Menu overview

1. Menu Operation
   a. Selection
   b. Speed keys
   c. Nonselectable options (grey areas)
   d. Previously selected options (check mark)

2. File menu
   a. Get publication
   b. Get graphics
   c. Save publication
   d. Print current publication
   e. Make new publication
   f. Exit
3. Page menu
   a. Set the page format
   b. Wrap the page around a graphic
   c. Rulers
   d. Grid and snap
   e. Move to new page
   f. Show page
4. Text menu
   a. Get text files
   b. Save text files
   c. Remove text
   d. Copy text to clipboard
   f. Insert text
5. Font menu
   a. Select fonts
6. Style menu
   a. Bold, italic, normal
   b. Point size
7. Baselines menu
   a. Adjust single
   b. Adjust column
   c. Adjust above
   d. Adjust below
   e. Change leading
8. Art menu
   a. Get and save art files
   b. Erase art
   c. Copy art to clipboard
   d. Insert art
   e. Flip art
   f. Change art
   g. Magnify screen locations

C. Side tools
   1. Text tool
   2. Graphics text tool
   3. Hand tool
   4. Selection tool
   5. Straight line tool
   6. Box drawing tool
   7. Pencil tool
   8. Eraser tool

UNIT OBJECTIVES

Upon completion of this unit, the student will be able to:

1. Load and use First Publisher.
2. Identify the five major areas of the First Publisher environment.
3. Move around a page with the page elevator.
4. Identify the two overlays with which First Publisher operates.
5. Identify four file types that operate with First Publisher.
6. State and explain three variables that are set in the page definition.
7. Define what a font is and print a sample listing of the fonts available in First Publisher.
8. Define and explain the following terms:
   Leading
   Column
   Gutter
   Clipboard
9. Create, get, and save art files.
10. Magnify screen locations.

MATERIALS REQUIRED

Student's Laboratory Guide for Unit 12.
Desktop Publishing software such as:
- First Publisher
- Mouse drivers
- LogiPaint

Computer system suitable for the software

PROCEDURES

Lecture
Group discussion
Evaluation
Instructor-directed activities
Independent student activity

LEARNING ACTIVITIES

1. Unit 8 material in Student's Laboratory Guide
2. Quiz on material covered

UNIT 12

QUIZ

Multiple Choice: Please mark the correct response on the answer sheet.

1. Which of the following is not part of the First Publisher environment?

   A. Menu bar
   B. Elevator
   C. Status Indicator
   D. Mouse cursor

2. What is used with First Publisher that functions similarly to the layers that are used in AutoCAD?

   A. Paint screens
   B. Overlays
   C. Layers
   D. Baselines

3. Which of the following is not a file type that First Publisher can use?

   A. MAC
   B. TXT
   C. PUB
   D. DWG

4. The only way to issue commands in First Publisher is with the mouse and the menu bar.

   A. True
   B. False

5. The number of fonts available in first publisher depends on the type of printer that you are using.

   A. True
   B. False

6. When you select text with the mouse and then select cut from the text menu, where does the text go?

   A. Nowhere
   B. Text Clipboard
   C. RAM
   D. Scissors tool

7. What defines where the text will be in First Publisher?

   A. Mice
   B. Rulers
   C. Page menu
   D. Baselines

8. When you use the eraser on the Graphics overlay, you must be careful not to affect any text.

   A. True
   B. False

9. What does First Publisher have that is equivalent to AutoCAD's Grid and Snap toggles?

   A. Define page
   B. Use rulers
   C. Move in steps
   D. It doesn't have anything

UNIT 12

KEY

1. C. Status Indicator
2. B. Overlays
3. D. DWG
4. B. False
5. A. True
6. B. Text Clipboard
7. D. Baselines
8. B. False
9. C. Move in steps

UNIT 13

UNIT TITLE: Desktop Publishing Operations II

UNIT CONTENTS

A. Overlays

1. The Graphics Overlay
   a. Selection
   b. Non active gray area
2. Side Tools
   a. Text Tool (Default Position)
   b. Graphic Tools
      Graphic Overlay
      Hand Tool
      Selection Tool
      Straight Line Tool
      Box Tool
      Pencil Tool
      Eraser Tool
      Line Width Options
3. The Text Overlay
   a. The character buffer
   b. The text clipboard
   c. Cut, copy, and paste
   d. Saving text
   e. Importing text from word processors
      ASCII files

B. Graphic Files

1. Art files
   a. Clip art
   b. Original art
   c. Saving an ART file
2. Art pages
   a. MAC files
   b. Selecting images from a MAC
   c. Creating ART files from MAC images
3. Placing images into a publication
   a. Get art from the Art menu
   b. Drag into proper location
4. Picture wrap
   a. Page menu

5. Graphic text
   a. Graphic text side tool
   b. Logos and banners
   c. Headers and footers
6. Editing images
   a. Cut, copy, and duplicate
      Moving between publications
      the graphics overlay
   b. Flip horizontal or vertical
   c. Invert
      White text on a black background
   d. Resizing graphics
   e. Magnify
      Mouse operation with magnify
   f. Erasing images
7. Selecting images
   a. Side tools
   b. Moving images
8. Drawing lines
   a. Straight line tool
   b. Boxes
   c. Line widths
   d. Freehand lines
      Pencil tool

UNIT OBJECTIVES

Upon completion of this unit, the student will be able to:

1. Enter text into First Publisher.
2. Use text that has been created with another program.
3. Edit text.
4. Move the text curser around the page.
5. Work with graphic tools.
6. Add text to graphics.
7. Use graphics from clip art.
8. Import graphics from paint programs.
9. Move, resize, and remove graphics.
10. Draw lines and boxes.

MATERIALS REQUIRED

Student's Laboratory Guide for Unit 13.
Desktop Publishing Software
   First Publisher
   LogiPaint or similar package

PROCEDURES

Lecture
Group discussion
Evaluation
Instructor-directed activities
Independent student activity

LEARNING ACTIVITIES

1. Unit 13 material in Student's Laboratory Guide
2. Quiz on material covered

UNIT 13

QUIZ

Multiple Choice: Please mark the correct response on the answer sheet.

1. When you select 'Start over' from the page menu, what features are not reset?

   A. Define page
   B. Baselines
   C. Both A and B
   D. None of the above

2. Which of the following is not a First Publisher overlay?

   A. Text
   B. Graphics
   C. Layers
   D. There are no overlays

3. How many overlays does First Publisher work with?

   A. One
   B. Two
   C. Three
   D. Four

4. If you type more than First Publisher can hold on one page, where does the extra text go?

   A. RAM
   B. Bit bucket
   C. Overflow
   D. Overlay

5. What key combination do you press to see if you have added more text than will fit on a single page?

   A. Esc-F1
   B. Ctrl-F1
   C. Home-F1
   D. Any of the above

6. When you pull down a menu and you see that some options are gray, what does this mean?

   A. Nothing
   B. They are not available
   C. They must be keyboard selected
   D. A mouse malfunction

7. When you cut text, where does it go?

   A. Overflow area
   B. RAM
   C. Nowhere
   D. Clipboard

8. When you choose any of the side tools other than the text tool, you are automatically shifted to the graphics overlay.

   A. True
   B. False

9. What kind of extension is used by First Publishers art pages?

   A. ART
   B. TXT
   C. MAC
   D. Any of the above

10. If you have placed an image over text, what command do you use to make the text flow around the image?

    A. Define page
    B. Move in steps
    C. Show page
    D. Picturestep

11. When you type text on the graphics overlay, you can still manipulate it with the conventional text tools.

    A. True
    B. False

UNIT 13

KEY

1. C. Both A and B
2. C. Layers
3. B. Two
4. C. Overflow
5. B. Ctrl-F1
6. B. They are not available
7. D. Clipboard
8. A. True
9. C. MAC
10. D. Picturestep
11. B. False

UNIT 14

UNIT TITLE: Laying Out a Desktop Publication

UNIT CONTENTS

A. Publication process

1. Prepare text files
2. Prepare graphic files
3. Define the page
4. Place and edit text
5. Adjust the layout (rearrange the baselines)
6. Add Headlines and change fonts
7. Add graphics, rearrange text if necessary
8. Add graphic elements such as lines and boxes

B. Layout Definition

1. The arrangement of text and graphics on a page that create a sense of order and balance
   a. Thumbnails
   b. Baselines
2. Page Definition
   a. Columns (1 to 4)
   b. Margins (Default per printer spec)
      Right
      Left
      Bottom
      Top
   c. Leading (Adjust for smallest font size)
   d. Gutter
   e. Define page at start of process
      Command destroys any existing baseline changes
3. Baseline adjustment
   a. Do after defining page
   b. Baseline menu options
      Above
      Below
4. Limitations
   a. Vertical movement limited to one baseline height
   b. Horizontal baselines may overlap but text will appear garbled
5. Zeroing a baseline
   a. Grab handle and move over opposite handle
   b. Causes text to flow past the baseline
   c. Enables columns of unequal width to exist
   d. Enables the apparent combination of columns on the same page

6. Text alignment (Baseline menu)
   a. Left
   b. Center
   c. Right
   d. Full
   e. Change leading
      May not be made smaller than that selected in the page definition
7. Selecting fonts
   a. Done with the style menu
   b. Baselines adjust for the largest size in a line
   c. Normal
   d. Bold
   e. Italic
8. Picture wrap
   a. Page menu selection
   b. Causes text to flow around an image
   c. Works with currently selected image
   d. Text flows to only one side of a selected image
9. Use Rulers
   a. Page menu option
10. Move in steps
   a. Equivalent to ACAD's snap

UNIT OBJECTIVES

Upon completion of this unit, the student will be able to:

1. State and define the publication process.
2. Define and create layouts.
3. State and define five variables that are defined by the page definition.
4. Define and adjust baselines.
5. Create layouts with multiple columns.
6. Align text any of four ways.
7. Select fonts.
8. Wrap text around graphics.
9. Use tools such as rulers and snap movements to aide in layout.

MATERIALS REQUIRED

Student's Laboratory Guide for Unit 14.
Desktop Publishing Software
   First Publisher
   LogiPaint or similar package

PROCEDURES

Lecture
Group discussion
Evaluation
Instructor-directed activities
Independent student activity

LEARNING ACTIVITIES

1. Unit 14 material in Student's Laboratory Guide
2. Quiz on material covered

UNIT 14

QUIZ

Multiple Choice: Please mark the correct response on the answer sheet.

1. Which of the following is not a step in publication layout?

   A. Prepare text files
   B. Define the page
   C. Place and edit text
   D. Spellcheck

2. Layout is the arrangement of text and graphics on a page, creating a sense of order and balance.

   A. True
   B. False

3. In First Publisher, what does the text rest upon?

   A. Grid
   B. Overlays
   C. Baselines
   D. Gutters

4. What is the distance between two lines of text called?

   A. Space
   B. Overflow
   C. Leading
   D. Overlay

5. What key combination do you press to check the vertical line spacing?

   A. Esc-F1
   B. Ctrl-F1
   C. Home-F1
   D. Any of the above

6. Which of the following is not a way that text can be justified with First Publisher?

   A. Ragged right
   B. Right
   C. Left
   D. Full

7. Upon what device is the default setting of the margins dependent?

   A. Video monitor
   B. Mouse
   C. Computer
   D. Printer

8. You can use define page at any time during the publication process without affecting any other settings.

   A. True
   B. False

9. What do you do to a baseline if you do not wish for text to rest upon it?

   A. Blank it out
   B. Zero it
   C. Erase it
   D. Any of the above

10. What is the maximum number of type faces that you should use one a single page?

    A. One
    B. Two
    C. Three
    D. Four

11. You can wrap text around both sides of a graphic within a single column.

    A. True
    B. False

12. What two options help you align text and graphics on a page?

    A. Snap
    B. Move in steps
    C. Use rulers
    D. Grid

Unit 14

KEY

1. D. Spellcheck

2. A. True

3. C. Baselines

4. C. Leading

5. B. Ctrl-F1

6. A. Ragged right

7. D. Printer

8. B. False

9. B. Zero it

10. B. Two

11. B. False

12. B. Move in steps
    C. Use rulers

UNIT 15

Desktop Publication Design

UNIT CONTENTS

The purpose of graphic design is to make it as easy as possible for readers to understand your message.

A. Plan ahead

1. Keep it simple
   a. Echo one or two visual effects throughout the publication
   b. Strive for a clean uncluttered look
2. Do your homework
   a. Know who the audience will be
   b. Know the publication's objective
   c. Know the document's basic format
   d. Know how the document will be distributed
3. Make a thumbnail
   a. Make one for each page
   b. Make it to the same proportions as the finished document
   c. Know the format - how many columns - where will the headlines go - graphics - captions

B. Use a logical sequence

1. Select a dominant element
   a. Could be a headline or
   b. Could be a graphic
2. Arrange the other items in order of importance
3. Use lines and boxes to guide the readers eye
   a. Do not over use graphic effects

C. Select fonts for a purpose

1. Fonts can make a piece look traditional or modern, simple or complex, serious or whimsical
   a. Use 9 to 12 point serif fonts for body type
   b. Use 14 to 18 point san serif fonts for headlines
   c. Plan for headlines to stretch across all columns in an article
2. Only use two different fonts in a document
   a. Use different styles i.e. bold or italics to create different levels of emphasis
   b. Don't choose two similar fonts for the same document

D. Examine the final document

1. Remove any redundant or insignificant elements
   a. Add white space by increasing margins, adding space between headings and text, or increasing the leading between baselines
2. Make sure the most important idea stands out
   a. Consider increasing the type size or
   b. Add a line or box for emphasis
3. Is the layout balanced the way that you intended
4. Make sure all of the elements fit together
   a. Modify or eliminate any jarring elements

E. Consider working with templates

1. Know what templates are available for your package

UNIT OBJECTIVES

Upon completion of this unit, the student will be able to:

1. State the purpose of graphic design.
2. State four items that must be researched prior to document design.
3. Define the term thumbnail and state four items that are contained in all thumbnails.
4. Explain what size and style fonts are useful for body type.
5. State what size and style fonts are useful for headlines.
6. Give two reasons why only two typestyles are used in a document.
7. Define template and give two reasons why they are useful.

MATERIALS REQUIRED

Student's Laboratory Guide for Unit 15.
Desktop Publishing Software
First Publisher
LogiPaint or similar package

PROCEDURES

Lecture
Group discussion
Evaluation
Instructor-directed activities
Independent student activity

LEARNING ACTIVITIES

1. Unit 15 material in Student's Laboratory Guide
2. Quiz on material covered

Unit 15

QUIZ

Multiple Choice: Please mark the correct response on the answer sheet.

1. What is the most important design principal?

   A. Keep it simple
   B. Make it pretty
   C. Express your knowledge
   D. Intimidate the audience

2. Before you begin a document, you must first know who the audience will be.

   A. True
   B. False

3. The number of columns that a publication will have will be reflected in the thumbnail.

   A. True
   B. False

4. Each page should have a dominant design element.

   A. True
   B. False

5. Lines and boxes add emphasis to a page, hence the more of them the better.

   A. True
   B. False

6. What size type is ideal for body type?

   A. 7 - 9 pt
   B. 10 - 12 pt
   C. 12 - 14 pt
   D. 14 - 18 pt

7. What size type is ideal for headlines?

   A. 7 - 9 pt
   B. 10 - 12 pt
   C. 12 - 14 pt
   D. 14 - 18 pt

8. If one or two font styles are good,then three or four are even better.

   A. True
   B. False

9. White space can act as a frame for a document.

   A. True
   B. False

10. Which of the following can help you save time?

   A. Working faster
   B. Getting more people involved
   C. Templates
   D. Help screens

UNIT 15

KEY

1. A. Keep it simple
2. A. True
3. A. True
4. A. True
5. B. False
6. B. 10 - 12 pt
7. D. 14 - 18 pt
8. A. True
9. A. True
10. C. Templates

UNIT 16

Desktop Design Principles

UNIT CONTENTS

A. Basic Concepts

1. Experiment
   a. Successful designs are usually the result of trial and error

2. Relate elements of graphic communications to their surroundings appropriately
   a. Elements need to be in proper proportion
   b. Appropriateness also relates to the audience and content
   c. Two tests for appropriateness
      Does it further the documents purpose?
      Is it suitable for the audience?
3. Make consistency a goal
   a. Do not change type style or size without reason
4. Do not force style
   a. Style is an outgrowth of your particular way of achieving consistency and appropriateness
5. Avoid static balance
   a. Unequal left/right or top/bottom balance helps provide movement
6. Organize each page around a single dominant element
   a. Avoid the confusion that results from equal sized graphic elements
7. Be aware that readers normally view pages in two page spreads

B. Establish a Format

1. Start by creating a grid
   a. A grid is a series of nonprinting horizontal and vertical lines
   b. A three column grid is most useful
2. Standardize the margins
   a. Margins set the publications off from everything else
   b. Be consistant with page numbers and other information within the margins
3. Borders provide a visual identity
   a. For a dignified and scholarly look, the same border can be used on all four sides of a page
   b. The top and sides of a page can have different borders
   c. Sometimes different borders are used on the top and bottom of a publication
   d. For a contemporary look, use borders that do not extend the full width of a page
4. Use columns
   a. A column should contain about two alplabets
   b. Columns do not have to be the same width
   c. Justified columns add formality
   d. Unjustified columns are easy to read

5. Organize the page with rules
   a. Vertical rules separate columns while horizontal rules separate articles within a column
6. To keep the reader informed, use headers and footers
7. Select type to add personality to the publication
   a. Avoid typefaces that draw attention to themselves
   b. As the cross lines contribute to readability, use it for body type.
   c. Sans serif type is ideal for headlines
   d. Do not mix too many typestyles
8. Provide a strong masthead for your publication
   a. Must be sized to work with the headline
   b. Size and placement of logos should remain consistant among a firms publications
9. Use strong headlines
10. Place subhead so they provide a transistion from headlines to body copy
11. Always use captions for photos and artwork
    a. Should summarize important points made in the body copy

C. Add Emphasis where necessary

1. Use large type size to emphasis important ideas
2. Vary typestyles to emphasis important ideas
3. Use white space to make design elements stand out
   a. Framing a page with white space strengthens the message by focusing the readers attention on the words.
   b. Keep white space to the outside
   c. White space can balance large photographics and blocks of copy
4. Use reverse type to call out elements of the page
   a. Reverse is most effective with san serif fonts
5. Use screens to attract attention
   a. Screens support sidebars well
6. Use boxes to accentuate text or graphics
   a. Shadows can be used with boxes to draw attention
7. Use graphics to highlight ideas
   a. Crop photos to accentuate the most important ideas
   b. Illustrations can echo the voice of a publication
   c. Charts and graphs bring numbers to light
8. Use pull quotes and cut lines to strengthen ideas
   a. Pull quotes summarize surrounding material and draw attention

D. Finish the document

1. Always proofread
2. Check leading
3. Avoid widows and orphans

UNIT OBJECTIVES

Upon completion of this unit, the student will be able to:

1. State five basic design concepts.
2. Define appropriateness as it applies to graphic communication.
3. State two tests for appropriateness in graphic communication.
4. Define style as it applies to graphic communication.
5. Define six principles of document formatting.
6. State eight ways to add emphasis where necessary.
7. Define widows and orphans as they apply to graphic arts and state why they are to be avoided.

MATERIALS REQUIRED

Student's Laboratory Guide for Unit 16.
Desktop Publishing Software
- First Publisher
- LogiPaint or similar package

PROCEDURES

Lecture
Group discussion
Evaluation
Instructor-directed activities
Independent student activity

LEARNING ACTIVITIES

1. Unit 16 material in Student's Laboratory Guide
2. Quiz on material covered

UNIT 16

QUIZ

Multiple Choice: Please mark the correct response on the answer sheet.

1. Successful designs are usually the result of trial and error.

   A. True
   B. False

2. What does appropriateness in graphic communications relate to?

   A. Audience
   B. Content
   C. Both A and B
   D. Pleasing the boss

3. In order to achieve a personal style, you have to be conscious of it and always work to achieve it.

   A. True
   B. False

4. Each page should be organized around a single design element.

   A. True
   B. False

5. Most formats can be organized around a grid.

   A. True
   B. False

6. Borders provide a visual idenity for documents.

   A. True
   B. False

7. How wide should a column be?

   A. One alphabet
   B. Two alphabets
   C. Three alphabets
   D. Four alphabets

8. Rules can be used to organize columns or articles.

   A. True
   B. False

9. Typefaces should be selected to draw attention to themselves.

   A. True
   B. False

10. What should always be used with photos and artwork?

   A. Rules
   B. Grids
   C. Captions
   D. White space

UNIT 16

KEY

1. A. True
2. C. Both A and B
3. B. False
4. A. True
5. A. True
6. A. True
7. B. Two alphabets
8. A. True
9. B. False
10. C. Captions

STUDENT MATERIALS

COURSE SYLLABUS

OFT 2404: CORPORATE ELECTRONIC PUBLISHING SYSTEMS

STUDENT'S GUIDE

COURSE SYLLABUS

COURSE NUMBER: OFT 2404

LECTURE HOURS: 3

LAB HOURS: 2

CONTACT HOURS: 4

CATALOG DESCRIPTION:

Designed to teach the student how to select, use, construct, implement, and integrate text, business graphics, data, line art and publications, electronically. Topics will include corporate publications, CEPS hardware and software requirements, text editing, graphics design, page layout, font selection and laser printers.

PREREQUISITE:

OFT 1205 or equivalent--Word Processing I is a hands-on introduction to the basic functions of a word processing system--creating, revising and printing documents.

TEXT:

Corporate Electronic Publishing Systems Student's Laboratory Guide.

INSTRUCTIONAL PROCESS:

Lecture
Group discussion
Class and laboratory assignments
Tests
Independent student activity
Instructor directed activity

COURSE OBJECTIVES:

1. Identify at least three significant events in the evolution of graphic communication.
2. Discuss early attempts at printing in Europe and the United States.
3. List and identify six typeface classifications.
4. List and discuss five factors to consider when choosing a typeface.
5. List and describe six parts of letters.
6. List the five common letter weights.
7. List the uses for the typefaces of the six major typestyles.
8. Identify measuring tools necessary to measure type and be able to use the tools efficiently.

9. Identify equipment and design instruments used in the graphic design industry.
10. Solve copyfitting problems.
11. List at least ten questions that must be answered before a design is begun.
12. Identify eight important layout and design considerations.
13. List the elements of a layout procedure.
14. Identify at least four elements of design.
15. Identify the six design principles.
16. List at least four common mistakes new designers make.
17. Identify at least two questions designers consider when using color in a design.
18. List the primary, secondary and intermediate colors.
19. Name at least three uses of color for identification purposes.
20. Identify at least five terms used in layout and describe how each is used.
21. Define thumbnails, rough layouts, comprehensive layouts and mechanicals.
22. List and define the major components of a CAP workstation.
23. Explain the purpose of each workstation component.
24. Define the major computer classifications and explain how each evolved.
25. Identify the two types of laser printers and explain their applications.
26. List the major devices used for input and explain their advantages and disadvantages.
27. Define and discuss the differences between digitizing and scanning.
28. Define basic computer graphic terms such as:
    pixel
    resolution
    aspect ratio
    graphic primitive
29. Turn a pixel on and off from a BASIC program
30. Make a computer graphic drawing.
31. Define the AutoCAD drawing environment and list 5 tools available there.
32. Name the first major interactive computer graphic system and list three reasons for its significance.
33. Name the major computer graphic applications and list three factors that differentiate them.
34. Load and start PaintShow.
35. Name and define the five parts of the PaintShow environment.
36. Draw with the pencil tool.
37. Select drawing shapes.
38. Select fill patterns.
39. Erase drawings using the file menu.
40. Input text.
41. Select and move information within a picture.
42. Save a picture.
43. Load a picture.
44. Exit PaintShow properly.
45. Create simple PaintShow pictures.
46. Create sample pictures that use each type font and style.
47. Create a simple slide show.
48. Use the positioning tool to select, move, and copy parts of pictures.
49. Select and change pattern palettes.
50. Magnify parts of the picture and edit the parts.

51. Select, save, and load a picture.
52. Double click to save keystrokes.
53. Print a picture in both landscape and portrait orientations.
54. Reverse colors as well as rotate and flip a picture.
55. State and explain the traditional publishing cycle.
56. Define 'Desktop Publishing' and explain how it differs from traditional publishing.
57. State the five major hardware components of a desktop publishing workstation.
58. State three major software components of a desktop publishing system.
59. State the projected growth rate for desktop publishing and two common problems that result from the rapid growth.
60. State and explain five areas that should be covered in a proposal.
61. Load and use First Publisher.
62. Identify the five major areas of the First Publisher environment.
63. Move around a page with the page elevator.
64. Identify the two overlays with which First Publisher operates.
65. Identify four file types that operate with First Publisher.
66. State and explain three variables that are set in the page definition.
67. Define what a font is and print a sample listing of the fonts available in First Publisher.
68. Define and explain the following terms:
    - Leading
    - Column
    - Gutter
    - Clipboard
69. Create, get, and save art files.
70. Magnify screen locations.
71. Enter text into First Publisher.
72. Use text that has been created with another program.
73. Edit text.
74. Move the text curser around the page.
75. Work with graphic tools.
76. Add text to graphics.
77. Use graphics from clip art.
78. Import graphics from paint programs.
79. Move, resize, and remove graphics.
80. Draw lines and boxes.
81. State and define the publication process.
82. Define and create layouts.
83. State and define five variables that are defined by the page definition.
84. Define and adjust baselines.
85. Create layouts with multiple columns.
86. Align text any of four ways.
87. Select fonts.
88. Wrap text around graphics.
89. Use tools such as rulers and snap movements to aide in layout.
90. State the purpose of graphic design.
91. State four items that must be researched prior to document design.
92. Define the term thumbnail and state four items that are contained in all thumbnails.
93. Explain what size and style fonts are useful for body type.
94. State what size and style fonts are useful for headlines.
95. Give two reasons why only two typestyles are used in a document.

96. Define template and give two reasons why they are useful.
97. State five basic design concepts.
98. Define appropriateness as it applies to graphic communication.
99. State two tests for appropriateness in graphic communication.
100. Define style as it applies to graphic communication.
101. Define six principles of document formatting.
102. State eight ways to add emphasis where necessary.
103. Define widows and orphans as they apply to graphic arts and state whey they are to be avoided.

EVALUATION OF STUDENTS:

Class and laboratory assignments will make up 65% of the final grade. These assignments are to be done by the student in the laboratory. These jobs are to be graded by the following guidelines:

Thumbnails will make up 10% of the final grade

Thumbnails will be graded on the basis of originality and aesthetics

The rough layout will make up 5% of the final grade. The comprehensive will be graded on neatness and how closely the comprehensive layout follows the rough layout.

The computer produced layout will make up 45% of the final grade. If the layout is camera ready on the first submission, a grade of 100 will be assigned to that job. If the job is not camera ready on the first submission, the student will make the necessary corrections and resubmit. If the job is correct on the second submission a grade of 85 will be assigned to the job. If the job is nota camera ready on the second submission, the student will make the necessary corrections and resubmit. if the job is correct on the third submission, a grade of 75 will be assigned to that job. If the job is not camera ready on the third submission, a grade of 50 will be assigned to that job.

Tests make up 15% of the final grade and will be given at the end of each unit. The material covered on tests will be the information given in handouts and in the lecture.

Outside of class work will make up 10% of the final grade. The outside of class work will be assigned from the Student's Laboratory Guide.

Technique will make up 10% of the final grade. The technique grade will evaluate the student's ability to work alone, asking questions only when necessary, the ability to make decisions after reading and comparing information, the ability to use the software with a minimum amount of help from the instructor, the ability to use time wisely, the ability to bring all necessary supplies and materials to class and the ability to maintain a positive attitude toward the instructor and course.

FINAL GRADE DETERMINATION:

Class and Laboratory Assignments	65%
Tests	15%
Outside class work	10%
Technique	10%
TOTAL	100%

LABORATORY GUIDE

CORPORATE ELECTRONIC PUBLISHING SYSTEMS

STUDENT'S LABORATORY GUIDE

UNIT 1--Cultural Influence of Graphic Communication

1. Write a two page report on "Early Attempts at Printing."

2. Look around you and carefully list all the products and materials that are a result of the graphic communications industry.

3. Make a list of items that companies use that are produced by the graphic communications industry.

UNIT 2--Typefaces and Styles of Type

1. Describe typeface psychology and why it is important that we learn to understand and recognize typefaces.

2. List the five important factors to consider when choosing a typeface and explain what is meant by each factor.

3. List and describe the six parts of letters.

4. Describe the distinguishing characteristics of typefaces. Identify the typeface part that generally gives the greatest assistance in specifically identifying the typeface.

5. Define a type font, a type series and a type family and how they are related to each other.

6. List the identifying characteristics of the following type styles:

(a) Text Type Style

(b) Roman Type Style

(c) Sans-serif Type Style

(d) Square-serif type style

(e) Script type style

(f) Novelty type style

7. What are the general uses of the following type styles and describe the type style's historical development.

(a) Novelty type style

(b) Script type style

(c) Square-serif typestyle

(d) Sans-serif type style

(e) Roman type style

(f) Text type style

8. Obtain three to four samples of each of the six type style groups. Magazines and area newspapers are good sources for these samples. Attach the samples to sheets of 8 1/2 x 11 white bond paper and identify the group to which each belongs.

9. Take the samples of type styles and show them to family and friends and ask them to give their impressions as to how the different type faces make them feel.

10. Sketch an original typeface design and identify a purpose for the typeface, show continuity among all letters. Have friends critique your new typeface. Make improvements in the typeface based on the critique.

UNIT 3 - Tools and Methods of Graphic Design

1. Practice converting the following units into printing basic units of measurement.

   (a) 1 pica is equal to points

   (b) 1 inch is equal to picas

   (c) 1 inch is equal to points

   (d) 24 points is equal to picas.

   (e) 3 picas is equal to points

   (f) When using 12 point type an em is equal to points

   (g) When using 12 point type an en is equal to points

   (h) When using 10 point type an 2 ems is equal to points

   (i) When using 8 point type an en is equal to points

   (j) 2 ems is equal to ens

   (k) 4 ens is equal to ems

   (l) 2 1/2 picas is equal to points

2. Select a news story from the local newspaper. Use a line gauge to measure the following:

   a. The length of the column in picas.

   b. What size type is used?

   c. What leading is used?

   d. What size type is the headline?

   e. Were different styles of type used in the story for emphasis?

3. Locate four ads in the newspaper and measure the different type sizes. List the different sizes.

4. Make a list of common tools and instruments used in layout and design.

5. Using a proportion scale, solve the following problems.

   a. A 5 x 7 photograph to be reduced to 2 1/2 x 3 1/2 would be % of original size?
   b. A 5 inch line to be reduced to 3 inches would be % of original size?
   c. A 4 inch line to be enlarged to 8 inches would be % of original size?
   d. A 2 inch line enlarged to 3 inches would be % of original size?

6. Read the following passage:

When the basic lessons of desk-top publishing are complete an interesting thing will occur. The student will begin to wonder how the printing industry ever got along without computer aided publishing. In the days before movable type all publishing was done either by copying manuscripts by hand using parchment and a pen or by carving a full page on a plock of wood, inking it and pressing the block to a piece of parchment.

Gutenberg made the first movable type cast in metal. He used a combination of lead, tin and antimony that remains nearly unchanged to this day. This alloy allowed characters to be perfectly cast because the alloy expands when cooling to form an exact duplicate of the matrix outline. Using Gutenberg's system in 1452, two workmen could cast and dress about twenty-five pieces of type per hour. The most notable work that Gutenberg did was his forty-two-line Bible (which meant forty-two lines to the page). This work was begun in in 1452 and completed by 1455. Each page contained approximately 2,800 characters. The pages were printed two at a time, so approximately 5,600 pieces of type were needed to make only one printing. In those days the common practice was to compose the next two pages during a press run, so at least 11,200 letters were needed to even begin printing. Working a normal work day (which was normally 12 hours) it took two craftsmen more than thirty-seven work days to prepare the initial font of working type. At this rate of speed it took more than three years to complete two hundred copies.

a. Using the character count method of copyfitting determine how many characters are in the above passage.

_____

b. Using a Helvetica style of type, 10 point on a 12 point leading, how much vertical space would the above passage require if it were to be set on a fourteen pica line?

_____

c. Using a Times Roman style of type, 10 point on a 12 point leading, how much vertical space would the above passage require if it were to be set on a fourteen pica line?

_____

UNIT 4 - Introduction to Graphic Design

1. Plan a specification sheet for the introduction of a new product or service. Choose the product or service that you wish to introduce from the following list:

   a. A lift and reclining chair that massages and lifts an individual out of a chair by tilting forward.

   b. A sports tire that will last 200,000 miles.

   c. A Yoga class.

PRE LAYOUT PLANNING INFORMATION

1. Design objective:

2. Target Audience:

3. Personality of the design:

4. Dominate design elements:

5. Budget Limitations:

6. Layout format:

7. Finished size of design:

8. Existing designs to match or beat:

9. Distribution method:

10. Reproduction method:

11. Finishing and Bindery Method:

12. Completion time needed:

13. Completion Date:

14. Cost of design:

UNIT 5--Principles of Design

1. List the five important principles of Graphic Design. Explain the underlying basis for each:

2. Does space have value? Cite the two dimensions of space that concern a designer.

3. Obtain four printed samples of advertising brochures. Consider the five design principles and determine whether each principle as used in the design

   DESIGN NO. 1

   Page proportion

   Balance

   Harmony or Unity

   Rhythm

   Contrast

DESIGN NO. 2

Page proportion

Balance

Harmony or Unity

Rhythm

Contrast

DESIGN NO. 3

Page proportion

Balance

Harmony or Unity

Rhythm

Contrast

DESIGN NO. 4

Page proportion

Balance

Harmony or Unity

Rhythm

Contrast

4. Prepare a color wheel. Use water paints and mix them to make secondary and intermediate colors.

5. Show examples of the four common color harmonies by pasting them next to categories below.

MONOCHROMATIC

ANALOGOUS

COMPLEMENTARY

TRIADIC

6. Design a logo using the initials in your name.

7. Cut out three ads from a newspaper. Cut up each ad and redesign it using the basic principles of design.

8. Take two photographs or take two illustrations from a newspaper. Write the copy and design a layout for a book or magazine ad.

UNIT 6 - The Layout Process

1. Find eight samples of various kinds of line copy. Find eight samples of continuous tone copy.

2. Define a thumbnail sketch. When should a thumbnail sketch be prepared? Explain the several method of preparing a thumbnail sketch.

3. Define a rough layout. List the specific purposes of a rough layout. Explain the general method of preparing a rough layout:

4. Define a comprehensive layout. List the purposes of a comprehensive layout. Explain the method of preparing a comprehensive layout.

5. What is the purpose of the overlay sheet on a comprehensive layout? What information should be on the layout sheet?

6. Explain the method of determining the margin sizes for each of the four sides of a page. Should the size of type on a page be considered in figuring margins?

7. Define a dummy layout. What is the main purpose of a dummy layout?

8. Select a photograph and crop it. Take that measurement and proportionally scale it so that it is one and one half times its original size. What are the original dimensions? What are the new dimensions?

9. Camera ready art has been prepared and it measures 8 inches by 10 inches. The 8 inch side must be reduced to 4 inches. What will be the length of the 10 inch side?

---

10. Using the following copy to make four thumbnail sketches in the boxes below. The thumbnails of layouts should be suitable for an ad in a magazine.

Headline - "Improve your Child's Chances. Send your Child to our summer youth camp."

The Text: Every child needs a chance and the best chance for your child is a Galveston College's Summer Youth Camp on the beautiful shores of the Gulf of Mexico. Your child will improve basic skills in mathematics, reading, English and computer. Swimming, boat rides, marine science adventures, cookouts, biking, shopping trips to the historic stand

area, volleyball, wally ball, tennis, racquetball, weight lifting, aerobics, exercise of fitness, beach excursions and old fashioned cook-outs highlight the exciting agenda planned for your child. Your son or daughter will meet new friends and enjoy down home cooking too! A chance of a lifetime. Register now by writing Galveston College, Summer Youth Program, 4015 Avenue Q, Galveston, Texas 77550.

Thumbnail #1

Thumbnail #2

Thumbnail #3

Thumbnail #4

11. Using the above information and selecting the best thumbnail, make a rough layout in the space below.

12. Using the information on the rough layout, make a comprehensive layout below.

4. Make a sketch of the components that within computer monitor based upon CRT technology. Label each of the major components.

5. Compare and contrast a CRT based computer monitor and a TV.

6. Make a list the major PC video standards. Include the year that they were introduced, their resolution, and their applications.

7. Describe an application for a full page monitor. List the advantages and disadvantages of such a monitor.

8. List the technologies that the first three generations of computers were based upon. Present three advantages of the current generation.

9. Briefly define the three main types of computers.

10. List three printer technologies. Describe the main application for each.

11. List three types of input devices. Describe the main application for each.

UNIT 8--Computer Graphic Overview

1. Define the following terms:

   Pixel

   Display resolution

   Aspect ratio

2. List the resolution of the graphic workstation that you use in lab.

3. Draw a grid that shows a grid of pixels that correspond to those used by your workstation. Number the pixels at each corner.

4. Write a short paragraph that describes the difference between a CAD and a Paint program.

5. Sketch the AutoCAD drawing interface. Label its major components.

6. Describe what improvements that you would make to the AutoCAD interface. Support your answers by listing the benefit associated with each change.

7. Describe three features that make CAD more productive than a manual drawing environment.

8. Sketch the PaintShow interface. Label its major components.

9. Compare and contrast the AutoCAD and PaintShow environments.

10. State which interface you prefer. Support your preference by listing three reasons for it.

11. Name the five major components of the PaintShow environment.

UNIT 9--Paint Program Overview

1. Using the screen capture utility supplied with PaintShow, capture a screen showing the paintshow interface. Save that screen in a separate file.

2. Load the file and cut out each of the five separate areas of the interface. Save each area in a separate file.

3. One at a time, recall each file containing a PaintShow interface component. Label each of parts of the component.

4. Print the files that you made in steps 3 and 4. Outline how they could be used in an online help facility or in an interactive tutorial.

5. Briefly describe how a mouse works.

6. Define the following terms and explain how they relate to a mouse.

   Click

   Double Click

   Drag

   Select

7. Explain how the following tools operate:

   Pencil

   Filled shapes

   Empty shapes

   Eraser tool

   Fill tool

   Spray can

8. Define the following terms and explain how they are used in PaintShow.

   Pull down menu

   Dialogue box

   Icon

9. Use the text tool to make a file that contains examples of the different PaintShow fonts.

10. Demonstrate the use of the style pull down menu in conjunction with the text tool. Print an example of such a file.

11. Describe the proper method of exiting PaintShow. List three reasons for exiting properly.

UNIT 10--Paint Program Operation

1. Describe the operation of the following basic tools.

   Lines fill

   Area fill

   Brush

   Spray

2. Explain how to stop an area fill.

3. Demonstrate familiarity with the tools menu by describing the use of the magnify function and the grid.

4. Use the edit menu to reverse the color of a screen.

5. Explain the use of the UNDO command from the Edit menu. Tell how it could be improved.

6. Make lines of various widths and colors.

7. Select a section of a drawing and copy it with the selection tool.

8. Explain the concept of a graphic clipboard. Demonstrate its use by copying a graphic to it and pasting it back into the drawing in multiple places.

9. How could the clipboard analogy be improved?

10. Explain the effect of font sizes and colors on communications.

11. Compare and contrast portrait and landscape orientations.

12. Explain the term DOS shell. State three situations in which it might be useful.

13. Explain how the flip horizontal and vertical commands can be used to increase productivity when working on symmetrical objects.

14. Name three situations in which the magnify command is invaluable.

15. If time permits, make a slide show of the files concerning the PaintShow interface.

UNIT 11--Desktop Publishing Overview

1. Who coined the term Desktop Publishing? What were the circumstances?

2. Will the functions now made possible with desktop publishing become standard within word processing programs in the future?

3. Define the term turnkey system. Name three manufacturers that market turnkey desktop publishing systems.

4. List five benefits of desktop publishing.

5. Name three problems associated with rapid growth in the desktop publishing marketplace.

6. Make a functional diagram of the different software components used in desktop publishing.

7. Describe the considerations necessary when selecting the separate software components of a publishing system.

8. Sketch the traditional publishing cycle.

9. List the parts of the publishing cycle where a small company would have to contract with outside agencies.

10. Elaborate on the possibilities of introducing errors into a document during the following processes.

    Manuscript generation

    Graphics generation

    Editing

    Typesetting

    Layout

    Printing

11. Make a flowchart of the desktop publishing cycle.

12. Compare and contrast the traditional publishing cycle with the desktop publishing cycle.

UNIT 12--Desktop Publishing Operation

1. Explain how you start First Publisher.

2. Sketch the First Publisher interface. Label the six major components.

3. Compare and contrast the First Publisher interface with PaintShow's.

4. Load a MAC file and view it by using the page elevator to move about the page.

5. List the two overlays used with First Publisher.

6. Explain the advantages of having multiple overlays.

7. State three types of files that can be used with First Publisher.

8. Define the term speed key.

9. List three speed keys used in First Publisher. State their purpose.

10. Explain how First Publisher's pull down menus work. Be sure to include how they differentiate between nonselectable options, valid options, and options currently in effect.

11. Load and print a sample publication.

12. Explain how a page menu can be used to set columns and adjust leading.

13. Tell what hardware component determines the margins and borders.

14. List three situations when the "Move in steps" option would be useful.

15. Insert a graphic into the sample publication. Make the text flow around it.

16. List two ways that the "Show page" option could be improved.

17. Demonstrate how the text clipboard works by cutting and pasting some text.

18. List the available fonts. Tell what can be done to increase the number of available fonts.

19. Make a file that demonstrates the families of font styles available. Be sure to include a sample of each size.

20. Define the term baseline.

21. Explain the purpose of each of the four options available to manipulate baselines.

22. Explain the difference between setting leadings in the baseline menu and the page menu.

23. State the difference between art and mac files.

24. Select a mac file. Cut a single image out of it and make an art file.

25. Clear your computer screen and import the art file.

26. Use the resize option make the image larger and smaller.

27. Make a copy of the image and invert it.

28. Compare and contrast the magnify available in First Publisher with that available in Paint Show.

29. Define the following side tools:

    Text tool

    Graphics text tool

    Hand tool

    Selection tool

    Straight line tool

    Box drawing tool

    Pencil tool

    Eraser tool

30. Compare graphics text with conventional text.

UNIT 13--Desktop Publishing Operations II

1. Explain two ways to select the graphics overlay.

2. What is clip art? How is it useful in desktop publishing?

3. Cut an image out of a mac file. Copy it into the graphics clipboard and move it between two separate documents.

4. Make a thumbnail of a symmetrical image that you can generate from clip art. Flip the clip art to create the complete image.

5. Name two applications for inverted text.

6. Why should you use a serif font for inverted text?

7. Draw boxes of various widths to create a white box around the inverted text.

UNIT 14--Laying Out a Desktop Publication

1. What is the purpose of a layout?

2. State the relationship between a document's thumbnail and its baselines.

3. Why must the page be defined prior to manipulating any baselines?

4. What is the vertical limitation of single baseline movement?

5. How do you zero a baseline? Why is this useful?

6. Why should you turnoff the picturewrap feature when it is not in use?

7. Explain the relationship between aspect ratio and the "Use rulers" option of the page menu.

8. What option does First Publisher have that is equivalent to AutoCAD's Grid and Snap?

UNIT 15--Desktop Publication Design

1. State the purpose of graphic design.

2. Define the acronym KISS. Explain how it applies to desktop publishing.

3. What must you know before you begin your document design?

4. What does your thumbnail tell you about your publication?

5. What would a logical sequence be in document design?

6. List three effects that can be implemented through font selection.

7. How many fonts should you use in a document?

8. What is a template?

9. List three positive aspects about working with templates.

UNIT 16--Desktop Design Principles

1. State what process from which successful designs usually result.

2. Select three successful designs from commercial publications. Explain what makes them successful.

3. Select three less successful design. Explain why they are not as successful.

4. Find a commercial layout that obviously results from a grid. List positive and negative aspects of the design.

5. How can rules be used to further a document?

6. What is the purpose of headers and footers?

7. State why captions should always be used in a publication.

8. List four ways that emphasis can be added to a document.

9. What must always be done when a document is finished?